Public Utilities

Volume 59 No. 11 May 23, 1957

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Public Utilities FORTNIGHTLY

VOLUME 59 MAY 23, 1957 NUMBER 11

ARTICLES

FEATURE SECTIONS

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

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Philo Plant of Ohio Power Company on American Gas & El
System. Stack in front is for the new Supercritical Unit.

B&W's Universal Pressure Steam Generator

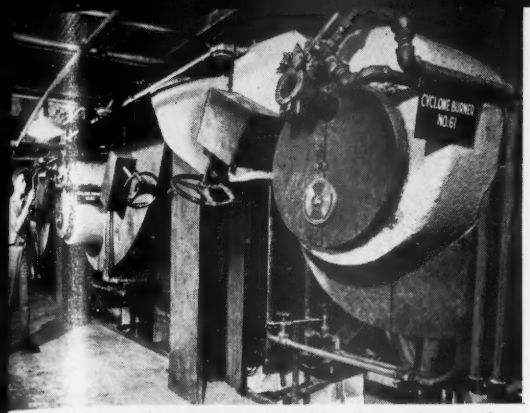
Helps Philo Plant Open the Way to New Economies in Steam-Electric Generatio

Generating history is being made at the Philo Plant of the Ohio Power Company on the American Gas & Electric System. Here, America's first commercial supercritical pressure steam-electric unit is in operation, probing the frontiers for new economies in the production of energy.

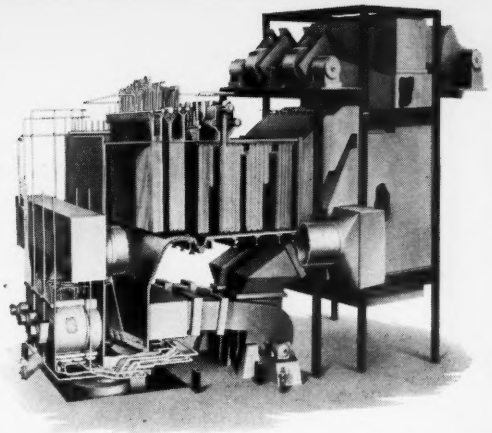
A Symbol of the Vision and progressiveness of America's public utilities and their suppliers, Philo is a landmark in engineering history. It is the result of years of engineering, research, and development that solved the many problems which had stood in the way of greater plant efficiency that comes with the hig possible combination of pressure and temperature

The Problems Solved included the very difficult of feedwater chemistry, of heat transfer and contro internal deposits, metallurgy for higher temperat combined with higher pressures, and developmen control and operating techniques.

Philo's Supercritical Unit, with a turbo-gener operating at 4500 psi and 1150F, is producing 120,000 kw, in the same space and using 45 per less fuel per kwhr than the 40,000 kw unit it repla

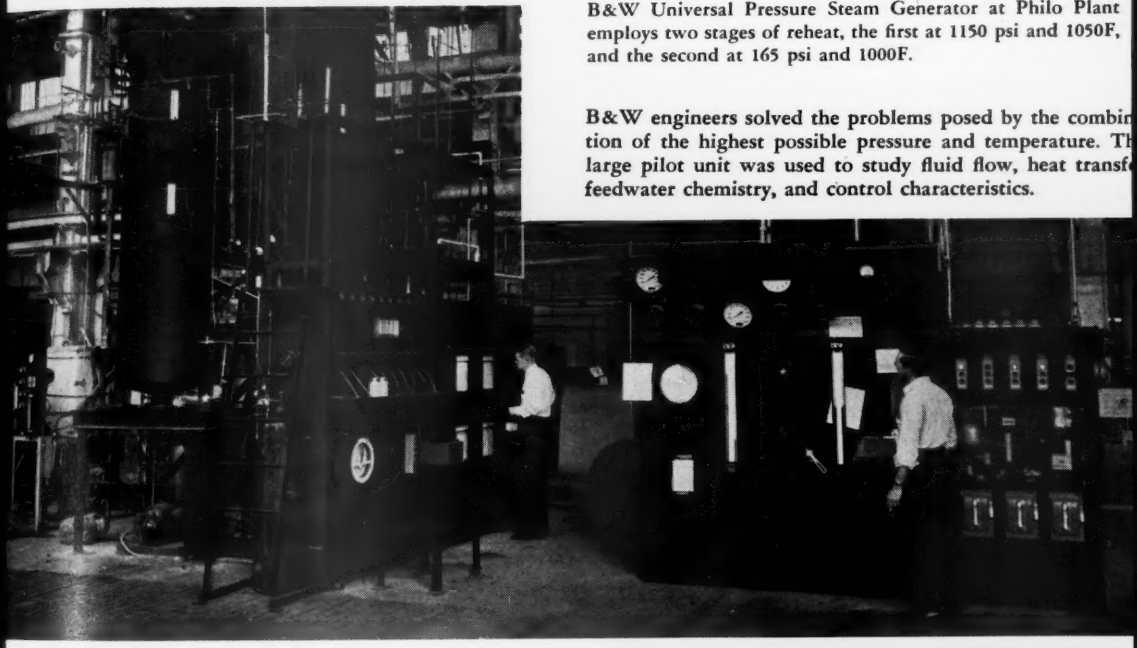


ree B&W Cyclone Furnaces assure rapid and complete combus-
, with minimum fly ash discharge and maintenance.



B&W Universal Pressure Steam Generator at Philo Plant employs two stages of reheat, the first at 1150 psi and 1050F, and the second at 165 psi and 1000F.

B&W engineers solved the problems posed by the combin tion of the highest possible pressure and temperature. Th large pilot unit was used to study fluid flow, heat transf feedwater chemistry, and control characteristics.



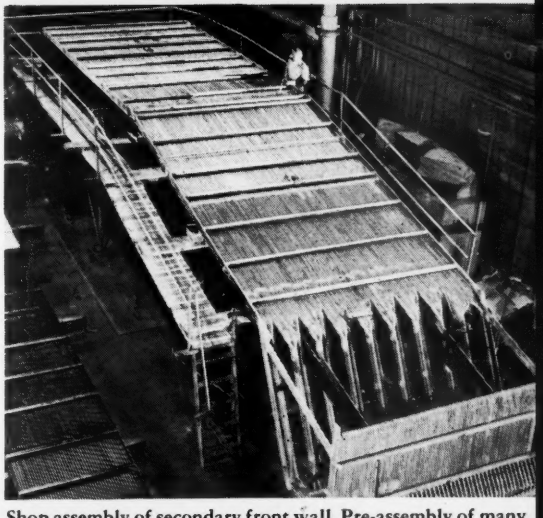
Two More **B&W** Universal Pressure Steam Gen- tors are now being built for The American Gas & ctric System. Together these will produce 900,000 —enough to supply residential power for a city of 00,000. Like Philo, they will continue to push ward this new frontier in steam generation.

Nearly a Century of B&W leadership in steam neration stands behind these achievements. The bcock & Wilcox Company, Boiler Division, 161 st 42nd Street, New York 17, N. Y.

G-833-CS

BABCOCK & WILCOX

BOILER DIVISION



Shop assembly of secondary front wall. Pre-assembly of many components for the Universal Pressure Steam Generator greatly speeded field erection.

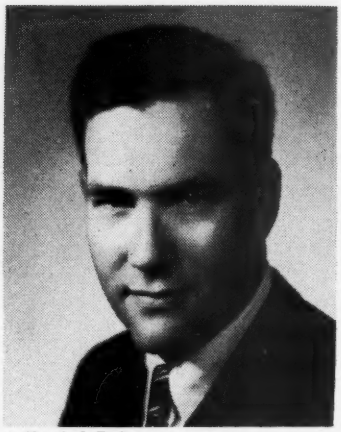
Pages with the Editors

THE opening article in this issue discusses the problem of electric utility organization as it relates to group sponsorship for financing or operating nuclear power projects, where such joint activity would bring them under the Public Utility Holding Company Act of 1935. It has been recognized ever since it became apparent that more than one electric company would probably have to join forces in order to get these expensive and complicated projects built and operating, that the Holding Company Act would provide a puzzle.

COMPANIES which several years ago worked out their organization so as to be free of regulation under the Securities and Exchange Commission naturally hesitate to get back into a situation creating another level of regulation.

IN the last Congress when legislation was proposed to exempt such joint sponsorship from holding company regulation, it became snarled. Then the Securities and Exchange Commission decided to work out a regulation, subsequently known as amended Rule U-7, to permit at least one type of organization for group sponsorship of a nuclear power project.

JOHN D. GARWOOD



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J. SINCLAIR ARMSTRONG

THE author of this opening article is the chairman of the SEC, the HONORABLE J. SINCLAIR ARMSTRONG. In writing this article for PUBLIC UTILITIES FORTNIGHTLY, CHAIRMAN ARMSTRONG was assisted by Ray Garrett, Jr., director, division of corporate regulation of the SEC, and Joseph S. Mitchell, Jr., SEC staff attorney, but the author assumes full responsibility for the views expressed therein.

BORN in New York city in 1915 and graduated from Harvard College (AB, '38) *cum laude,* and Harvard Law School (LLB, '41), CHAIRMAN ARMSTRONG started his practice of law in Chicago with the firm of Isham, Lincoln & Beale. From 1945 to 1946 he was on active duty in the U. S. Naval Reserve. He returned to his law firm in 1946, was made a partner in 1950, and practiced until July, 1953, when he took office as a member of the Securities and Exchange Commission for a term expiring June 5, 1958. CHAIRMAN ARMSTRONG was designated by President Eisenhower to the post of chairmanship of the SEC on May 25, 1955. He has also served as the commission's delegate to the President's Conference on Administrative Procedure.

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120 EAST 41ST STREET • NEW YORK 17, N. Y.

MR. ARMSTRONG has recently (April 16th) been nominated by President Eisenhower to be Assistant Secretary of the Navy (Financial Management). Pending Senate confirmation CHAIRMAN ARMSTRONG continues to head up the SEC.

* * * *

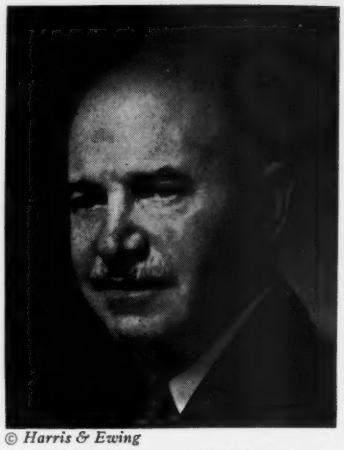
DR. JOHN D. GARWOOD, professor of economics at the Fort Hays Kansas State College, has been studying the educational aspects of public utility economics for quite a while. He has come to the conclusion that what the teacher thinks will determine in many instances what the student thinks. And to find out what teachers are thinking about on the subject of public utility economics, he sent out a questionnaire to over three hundred of them. He received about 47 per cent qualified returns and the result is a very interesting cross section of academic thinking in this important field, written from a most objective point of view.

THERE is variety as well as provocative reaction reflected in the numerous quotations selected by DR. GARWOOD from his rich source material. For example, twenty-seven professors favor the Eisenhower "partnership policy" for multipurpose power as compared with twenty-two opposed and fifteen without opinion.

DR. GARWOOD was educated at the University of Wisconsin, where he took a Master's degree, specializing in taxation. During that period he took his public utilities under Dr. M. G. Glaeser. He has also done graduate study at the University of Louisiana, the University of Southern California, and the University of Colorado, where he took his Doctor of Philosophy degree. Prior to joining the faculty of the Fort Hays Kansas State College, DR. GARWOOD taught at Morningside College, Sioux City, Iowa; University of Louisiana, Baton Rouge, Louisiana; and the University of Colorado, Boulder, Colorado.

* * * *

CONGRESS made the Secretary of Interior the marketing agency for all power developed at federal multipurpose projects when it passed the Flood Control Act of 1944. In the first of his 2-part series, published in our preceding issue, ROBB M. WINSBOROUGH, vice president of Middle West Service Company, discussed the 30-year contract which a former Secretary of the Interior, Oscar Chapman, signed in 1952 to furnish power to Reynolds Metals Company in combination with Arkansas Power & Light Company.



© Harris & Ewing
ROBB M. WINSBOROUGH

THE government now wants to annul the contract. In the second instalment, beginning on page 749, MR. WINSBOROUGH discusses what can and should be done about the entirely unworkable provision (§ 5) of the Flood Control Act, which has caused the parties concerned so much difficulty, so far, and will probably cause more trouble before Congress passes remedial legislation.

* * * *

FOLLOWING our annual custom of many years, the next issue will be of special interest to those readers in the electric utility industry. It will be published contemporaneously with the gathering of the members of the Edison Electric Institute for their annual convention in Chicago, June 3rd to 5th.

THE next number of this magazine will be out June 6th.

The Editors

WHEN ENDURANCE COUNTS

Overcoming the perils of Scylla and Charybdis, Jason and the Argonauts demonstrated great endurance in the face of severe destructive elements. Another—and more modern—demonstration of great endurance is Kerite Cable. Under every manner of adverse condition, throughout the world, Kerite Cable stands steadfast against all the elements which would destroy its efficiency. Kerite Cables, in perfect operating condition after 40 or more years, in hazardous original installations, is the rule, rather than the exception. The world over, the Kerite name is recognized as a symbol of ***durability***.

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Coming IN THE NEXT ISSUE

(June 6, 1957, issue)

★

THE AMERICAN WAY TO THE POWER-FULL FUTURE

The title of this article, especially prepared for PUBLIC UTILITIES FORTNIGHTLY by Donald S. Kennedy, president of the Edison Electric Institute and president of the Oklahoma Gas & Electric Company, also happens to be the theme of the 1957 national convention of the Edison Electric Institute, meeting in Chicago, June 3rd to 5th. While the author takes pride in the achievements of the investor-owned electric utility industry over the quarter-century of the association's existence, he sees a continued threat to the industry's future, pointing to the rise in the generating capacity of government power projects from 2.4 million kilowatts in 1932 to 28.8 million kilowatts in 1956, with almost as much again in new capacity slated for the next ten years.

ELECTRIC POWER FOR AN EXPANDING ECONOMY

Teamwork is the keynote of this article by the Honorable Fred A. Seaton, Secretary of the Interior, especially prepared for PUBLIC UTILITIES FORTNIGHTLY. And teamwork will be necessary if the investor-owned electric utilities, in co-operation with government authorities, are to fulfill the almost explosive demand indicated for the future of more and more power. He believes that much progress has been made under the present administration's policy of "planned teamwork" to avert regional power shortages threatened and even predicted in former years.

THE INVESTOR'S RÔLE IN PRESERVING AMERICAN FREEDOM

If risk capital in sufficient quantity is not made available through normal channels of investment to provide the tools for industry, our government may, at some point, be forced to step in and adopt a forced investment policy. The matter hinges on **savings** in the view of Edwin Vennard, vice president and managing director of the Edison Electric Institute, author of this forthcoming article. He points to one of the principal deterrents to saving—the American tax structure—which, in turn, is based on the level of government spending.

PARTNERS IN INDUSTRIAL RESEARCH

One-fifth of the industry's research and development spending is being done by electric manufacturers. Gwilym A. Price, chairman and president of the Westinghouse Electric Corporation, shows that much of this is being carried on as a partnership between the two branches of the electric industry—the manufacturer and the operating utility company.

IS THE HOLDING COMPANY ACT GETTING OBSOLETE?

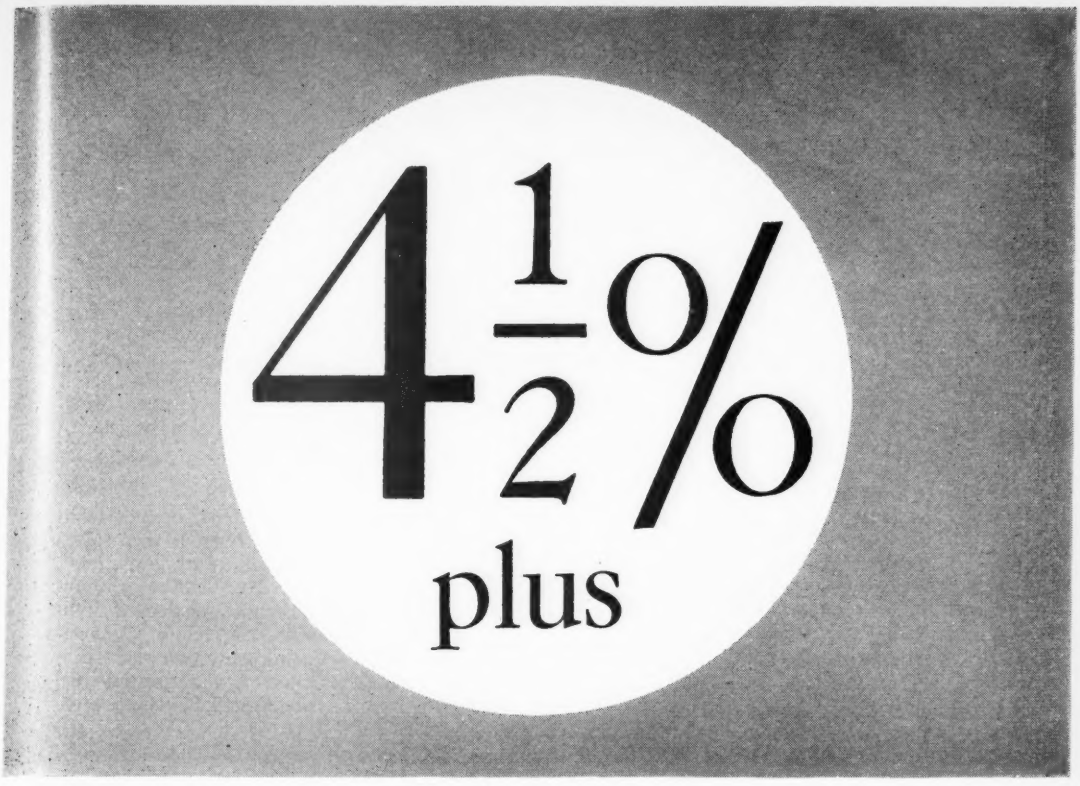
Twenty-two years ago, after a stormy passage through Congress, marked by close votes, a sensational investigation, and bitter debates, the late President Roosevelt approved the Holding Company Act. Its purpose was to regulate and, in a large measure, eliminate unwieldy, wasteful, and otherwise undesirable holding company systems in the gas and electric field. Today all but a handful of the old holding company combinations have been broken up. Eugene S. Loughlin, chairman of the Connecticut Public Utilities Commission, points out that new economic and technical demands on the financing and organization of modern operating utility plant have revived the question of whether some of the present Holding Company Act restrictions against joint ventures are retarding needed plant progress and more rapid development, particularly in the nuclear reactor field.

AIR CONDITIONING AND ITS ELECTRIC REQUIREMENTS

One of the most important fields of new business and power consumption still remaining to be fully realized by the electric utility industry is air conditioning. G. T. Kellogg, of the staff of the Air-Conditioning and Refrigeration Institute, trade association of the air-conditioning industry, tells how the attitude of the electric utility industry has changed in recent years towards the use of electricity for space heating. He tells why the reason for this change is the phenomenal public acceptance of air conditioning as a double-duty supplement to electric space heating.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***



Expansion financing costs more— rates can pay the increase...

... if rates are realistically upped to bear higher interest, utilities must offer to get new money for sorely needed expansion. Public service commissions* realize the increased cost of new financing and will listen to applications for rate increases with this as one of the bases. BUT, to be sure all facts and figures will stand scrutiny, accurate RATE ANALYSES covering company experience over a *sufficient* period of time are a MUST.

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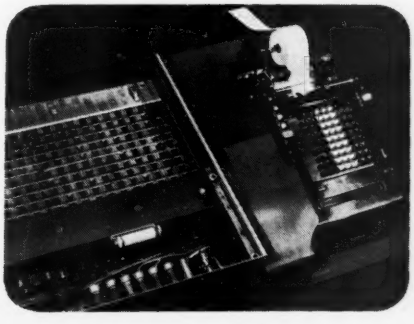

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EDITORIAL STATEMENT
The Wall Street Journal.

"Throughout this country's past its magnificent future has always been created by individual initiative, not by government. In this generation we have had a surfeit of government; we have too much government now. Why should not the future belong to the individual instead?"

M. S. RUKEYSER
Columnist.

"Since workers are first-class citizens, neither management nor union groups should arrogate to themselves the right to limit the freedom of choice of individuals. If pressure groups for one reason or another circumscribe the discretion and freedom of choice of individuals in selection of vocations, merchandise, investments, and ideas, they are—wittingly or otherwise—preventing those affected from deriving the full spiritual and material benefits of the American competitive system."

HARRY F. BYRD
U. S. Senator from Virginia.

"Current taxes, from all sources—federal, state, and local—are taking a full third of the income of all citizens to finance government activities. Taxes at present rates from current sources are taking more than 90 per cent of some individual incomes and more than 60 per cent of the net income of most corporations. The present tax rates are approaching confiscation. The economy cannot much longer survive present tax rates on current sources, and it should be understood that tax sources have been exhausted."

WILLIAM McC. MARTIN, JR.
Chairman, Federal Reserve Board.

"[Achieving a balance] in an economy as strong as ours can be solved in large measure by a reduction in spending and an increase in saving brought about by market forces. While concepts may be modified, and should be from time to time, our basic thinking continues to recognize private property, free competitive enterprise, and the wage and profit motive, operating in the open market through the price mechanism, as the most effective means of developing and sustaining our march toward better living standards and the elimination of poverty."

ROGER A. FREEMAN
Former research director, education committee, Intergovernmental Relations Commission.

"Education, for many years, has been the largest item of public expenditure in the United States next to national defense. The cost of education accounts for about one-third of all state and local expenditures, and is about twice as great as the outlay for the next largest function, highways . . . school funds have consistently risen faster than enrollment, or other public services, and are continuing to do so. If we deduct war-connected expenditures from the national income and relate the rest of our income to expenditures for education, we find that the share going to education has risen from 1.5 per cent in 1900 to 4.6 per cent in 1955."

LILCO's "77 acres of service" at Hicksville—the first atom-age service center—complete from spare parts and weather service to feeding and sleeping accommodations.

Private line channels form nerve system for first atom-age control center in U.S.

Bell System communications help make the Hicksville headquarters of Long Island Lighting Co. self-sustaining. First of its kind in the U. S., the center can control the supply of power to 1½ million people under emergency conditions.

From the underground control center, System Operators control the load at seven generating stations. They also trip and close power switches and monitor the operation of 29 remote substations. This finger-tip control is accomplished entirely over Bell System private line channels.

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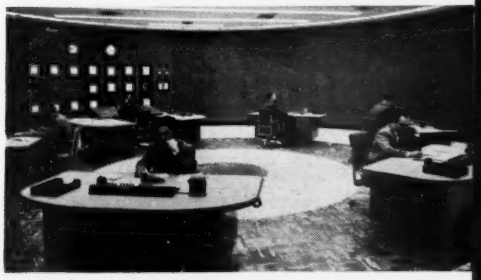
"Our supervisory control system lets us do just about everything at plants and substations but sweep up"—O. H. Nauman, chief system operator.



LILCO's continuous 68-ft. system control board was designed to provide better supervision of an area whose population has jumped 50% in four years, and to function efficiently in time of major disaster.

A question for every electric utility

JUST HOW FLEXIBLE CAN POWER SUPPLY GET?

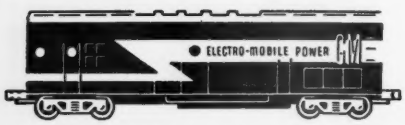
Giant strides to improve flexibility of supply to customers have been taken in recent decades by the electric utility industry. Today power availability must anticipate load growth more than ever before. Inter-connected supply permits transferal of power from one area to another as varying geographical load demands or emergency situations arise.

Even greater flexibility, however, can be attained—by means of Electro-Mobile Power. Truck-trailer or rail units permit shifting increments of power from place to place as demands change. Units can be used singly or in multiple—added like building blocks to match requirements exactly. And provision for impulse starting and stopping allows unattended operation from any location in the system.

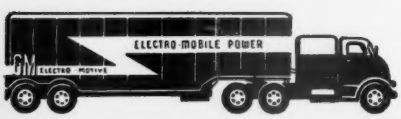
Moreover, the placement of Electro-Mobile Power close to the load not only relieves the central station of a block of power, but also reduces the line loss between the central station and the load for that block of power. This is a major factor at time of peak.

Just how flexible can service get? Far more flexible than you might imagine with present equipment if Electro-Mobile Power is employed to answer additional requirements. A joint analysis of your system can reveal the savings and increased flexibility possible with these units. Contact your Electro-Motive representative for full information.

Electro-Mobile Power adds to system flexibility in many ways

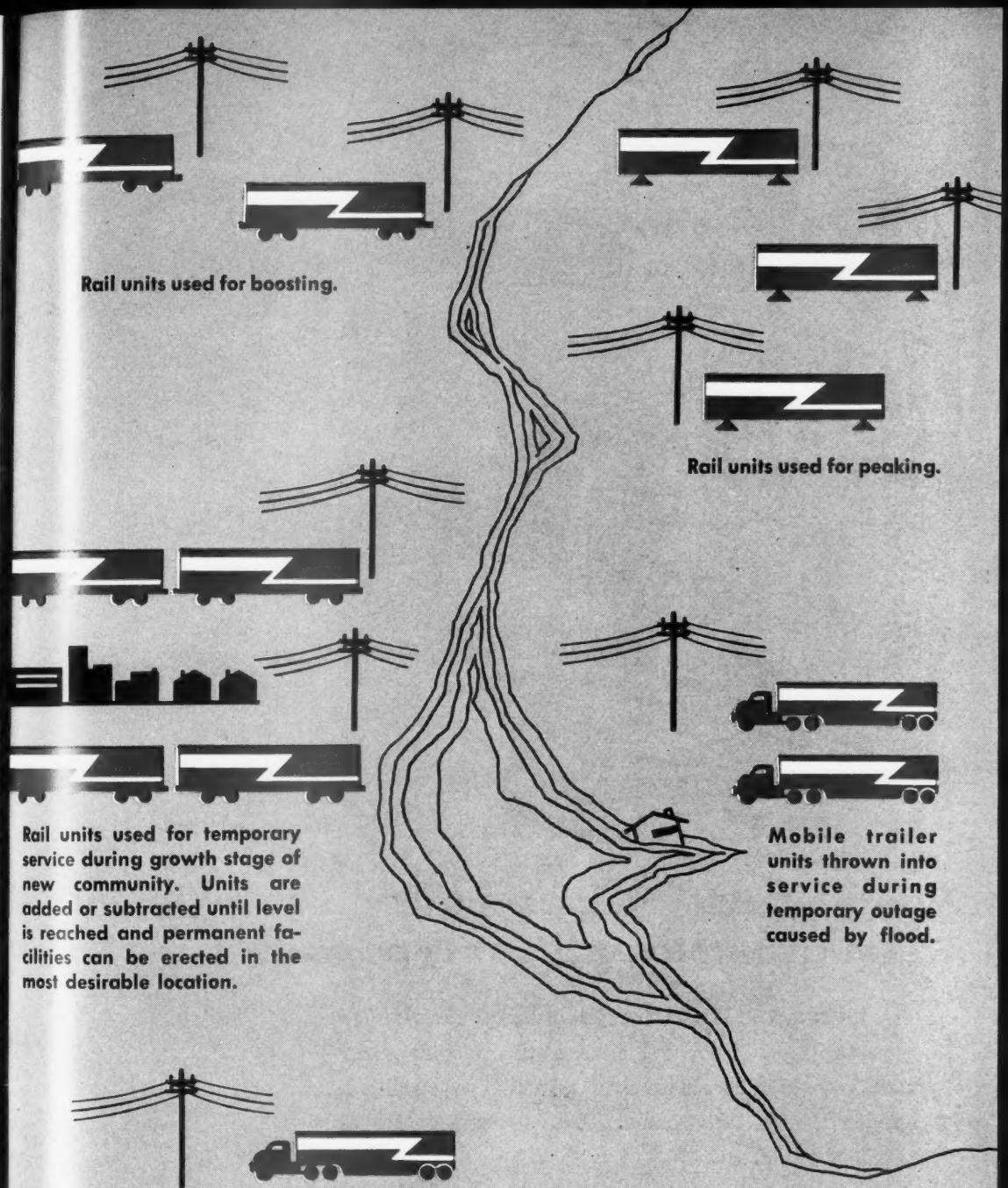


RAIL CAR—1000 kw units for use on sidings or placed on piers for semi-permanent use.



TRUCK TRAILER—500 kw units offer excellent mobility for many temporary applications.

Representative electric utility companies across the country are now providing better service to customers through the use of Electro-Mobile Power. This diagram is a composite of the different jobs these units, both truck-trailer and rail, are performing. Detailed information on these applications—operating costs, KWH produced, reason for use, location, etc.—are available through your Electro-Motive representative.



Rail units used for boosting.

Rail units used for peaking.

Rail units used for temporary service during growth stage of new community. Units are added or subtracted until level is reached and permanent facilities can be erected in the most desirable location.

Mobile trailer units thrown into service during temporary outage caused by flood.

Mobile trailer units being used during line relocation resulting from new highway construction.

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MAY-JUNE

Thursday—23 *Pennsylvania Electric Association, Systems Operation Committee, begins meeting, Skytop, Pa.*	**Friday—24** *Southeastern Gas Association begins annual spring planning meeting, Savannah, Ga.*	**Saturday—25** *United Press Broadcasters of Pennsylvania begin meeting, Mechanicsburg, Pa.*	**Sunday—26** *National Association of Electrical Distributors begins annual convention, Washington, D. C.*
Monday—27 *Kansas-Missouri Telephone associations begin joint convention, Kansas City, Kan.*	**Tuesday—28** *Pacific Coast Gas Association-American Gas Association begin regional public relations workshop, Salt Lake City, Utah.*	**Wednesday—29** *Annual Short Course in Gas Technology begins, Texas College of Arts and Industries, Kingsville, Tex.*	**Thursday—30** *North Carolina Association of Broadcasters ends 2-day meeting, Asheville, N. C.*
Friday—31 *Edison Electric Institute, Financing and Investor Relations Committee, begins meeting, Chicago, Ill.*	**JUNE** **Saturday—1** *American Society of Mechanical Engineers will hold semiannual meeting, San Francisco, Cal. June 9-13.* ***Advance notice.***	**Sunday—2** *Annual Conference on Industrial Research begins, Harriman, N. Y.*	**Monday—3** *Edison Electric Institute begins annual convention, Chicago, Ill.*
Tuesday—4 *Pennsylvania Independent Telephone Association begins annual convention, Buck Hill Falls, Pa.*	**Wednesday—5** *Midwest Association of Railroad and Utilities Commissioners begins annual convention, Kansas City, Mo.*	**Thursday—6** *National District Heating Association ends 4-day annual meeting, Hot Springs, Va.*	**Friday—7** *Home Lighting Workshop ends, Arizona State College, Tempe, Ariz.*

Courtesy, Pacific Power & Light Company
Photo by Earl C. Pote

"Something old, something new . . ."

Ten-foot "bull wheels" were once used in Salt Creek (Wyoming) oil fields for drilling to 3,500 feet. Now electrically powered rigs drill to 16,000 feet.

Public Utilities
FORTNIGHTLY

VOL. 59, NO. 11 MAY 23, 1957

Nuclear Power Projects and the Holding Company Act

This article describes the SEC's amended Rule "U-7" which was adopted in July, 1956, to clarify the SEC's view of the law as it applies to organizations for group sponsorship of a nuclear power project. The author explains why he thinks the Holding Company Act is not an impediment to industrial participation, to the fullest possible extent, in the development of nuclear power for commercial purposes.

BY THE HONORABLE J. SINCLAIR ARMSTRONG*
CHAIRMAN, SECURITIES AND EXCHANGE COMMISSION

IN responding to the challenge of the development and use of nuclear energy for the production of electric power, the American privately owned electric utility industry has encountered legal and regulatory problems, in addition to scientific and engineering obstacles. The need of national policy, as well as the possibility that the Congress might authorize greater direct participation by the federal government in the development of nuclear power capacity than has been provided as yet, has caused the electric utility industry to devote great efforts in this field. Perhaps these efforts have been greater than those which would have been expended had immediate economic necessity or advantage been the only factor encouraging

* For additional personal note, see "Pages with the Editors."

and pushing the development of this infant and revolutionary industrial change.

Among legal problems which the electric utility industry faced was the possibility of involvement with the Public Utility Holding Company Act of 1935, which is administered by the Securities and Exchange Commission. This led first to an industry-proposed amendment of the Holding Company Act in the spring of 1956, which was not enacted by the Congress. Second, at about the same time, the Securities and Exchange Commission adopted an amendment to the applicable rules of the commission under the Holding Company Act. This amendment was adopted in full accordance with the requirements of the act as it is presently in effect.

THE question whether the federal government should construct nuclear power reactors on a commercial scale is not one for which the Securities and Exchange Commission has responsibility. Rather, that is a matter of national public policy over which the Congress has complete power. It is, however, the responsibility of the Securities and Exchange Commission to administer the Public Utility Holding Company Act of 1935 and the other statutes entrusted to its charge in accordance with national policies expressed by Congress. It appears clearly to be national policy that private industry should participate in developing nuclear power as rapidly as it is able and willing to do so consistent with the law and the regulatory authorizations required by law.

The Securities and Exchange Commission has assumed that private participation in this area should be encouraged as far as permitted by law. Our understanding of national policy as expressed by the Congress, combined with the information which came to us about industry problems during the congressional committee hearings in the spring of 1956, led the commission to adopt an amendment to Rule U-7,[1] pursuant to the last sentence of § 2(a)(3) of the Holding Company Act.[2] The amended rule, which was adopted on July 13, 1956, provides in substance that

> Any company whose only connection with the generation, transmission, or distribution of electric energy is the ownership or operation of facilities used for the production of heat or steam from special nuclear material which heat or steam is used in the generation of electric energy shall not be deemed an electric utility company within the meaning of § 2(a)(3) of the act, if such company is organized not for profit and is engaged primarily in research and development activities.

SINCE the act defines a holding company in terms of ownership of stock in or other control over an electric or gas utility company, it is clear that, if a nuclear reactor company is not an electric company, no sponsoring company can become a holding company under the act by virtue of its interest in or control over the reactor company.

It should also be noted that § 20(d) of the act provides immunity from liability for reliance in good faith on an order or rule of the commission.

The amended Rule U-7 provides a filing procedure for companies claiming

status under the rule and a procedure whereby the commission can challenge such a claim to status. These and the other provisions of the rule will be discussed in more detail later. Some discussion of the background leading to its adoption should aid in understanding the commission's action.

At the time the amended rule was adopted and released to the public, the commission explained:

> The Securities and Exchange Commission is fully aware of the national and world-wide importance of the development of nuclear power for peaceful purposes in accordance with the policies expressed by the Congress in the Atomic Energy Act of 1954. These include the promotion of world peace, improvement of the general welfare, increase in the standard of living, and strengthening of free competition in private enterprise.
>
> We do not believe that the Public Utility Holding Company Act, as administered by the Securities and Exchange Commission, should deter private enterprise from going forward with nuclear power projects. We believe that nuclear reactors for the generation of electricity can be developed and ultimately incorporated into the electric utility industry in a manner consistent with the principles and standards of the Holding Company Act.

In the decision of the Securities and Exchange Commission in the one case which up to now has been presented, the commission held that twelve utility companies in the New England states could jointly sponsor a nuclear power project in a manner consistent with the act. Yankee Atomic Electric Co. Holding Company Act Release No. 13048, November 25, 1955.

Other nuclear power projects, however, have taken different forms of corporate organization and sponsorship. Although we believe that nuclear power-generating plants should be established in a manner consistent with the Holding Company Act, the statute permits flexibility in its application during the period when such projects are primarily engaged in research and development. In the Holding Company Act, enacted in 1935, presumably the Congress did not expressly foresee the development of nuclear energy. How-

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ever, the statute provides that the state of the art of generating and transmitting electric energy is a factor for the commission to consider in applying the standards of the act.

The amendment to Rule U-7 was adopted today after consideration of the comments of several utility companies as well as from the Atomic Energy Commission and the American Public Power Association. We have not adopted all of the suggestions offered because we believe the present amendment goes as far as the existing demonstrated need.

The amendment adopted today does not foreclose us from adopting further amendments or from issuing orders related to particular cases. Utilities or industrial corporations which are considering participation in nuclear power projects may discuss their organizational plans with our staff at any time if questions arise as to the applicability of the Holding Company Act or the exemptions available by rule or order under the act.

The Securities and Exchange Commission is aware that proposed legislation (S 2643, 84th Congress) is pending in the Congress which would amend the Holding Company Act so as to achieve in large part the same effect as the amendment to Rule U-7 which we have adopted today. The Securities and Exchange Commission is in complete accord with the policy of the Congress as it may come to be expressed if that proposed legislation is enacted. Although we have expressed the view to congressional committees that we doubt the necessity for legislation because of our discretionary authority under the Holding Company Act, the end to be achieved by our amended rule and the administrative policy it expresses are wholly consistent with the proposed legislation.

Although not meeting every case that conceivably might arise, the amended rule will demonstrate that neither the Securities and Exchange Commission nor the Public Utility Holding Company Act stands in the way of progress in the peaceful uses of nuclear energy under the free enterprise system.

COMPANIES which have sought to participate in the development of nuclear energy for the production of electricity on a commercial scale, as authorized by the Atomic Energy Act of 1954, have encountered new and challenging problems of organization and finance. There is no problem in this area, of course, for the company able and willing to finance a nuclear power project from its own resources and to include the reactor among its own assets rather than in a separate subsidiary corporation. But these projects run to many millions of dollars, and most companies interested in serious participation do not believe it appropriate to attempt to carry the whole load. Most of the current projects of which we are aware involve group sponsorship. Group sponsorship raises problems which may be best solved by creating a new corporation, which in turn raises the possibility of involvement with the Holding Company Act.

The first project to come to the official

Nuclear Reactor Progress and the SEC

"I DO *not believe that the Holding Company Act should impede rapid progress in the development of nuclear power on a commercial scale. An important administrative measure to allay any fear that impediments may arise is our encouragement of early discussions between prospective sponsors of nuclear power projects and the commission and its division of corporate regulation. By being informed and consulted at the planning stage the commission and its staff can help to shape the organization of projects into forms which fully protect the public interest in accordance with the standards of the act without unreasonable or burdensome restrictions upon the electric utility industry.*"

attention of the commission was that of Yankee Atomic Electric Company, a nuclear reactor and generating company to be owned by twelve sponsoring utility companies in New England. There was no question but that Yankee Atomic Electric Company was, or was to be, an electric utility company as defined in the act; and among the sponsors seeking to acquire substantial blocks of stock of Yankee were a registered holding company, one of its subsidiaries, and several companies enjoying exemptions as holding companies under § 3 of the act, as well as companies not in any way subject to the act.

THE joint application-declaration filed by Yankee and its sponsors sought commission approval for the issuance of stock by Yankee under §§ 6(b) and 7 of the act, the acquisition of the stock under §§ 9 and 10 by the companies subject to those provisions, and renewed exemptions under § 3 on behalf of the two exempt holding companies proposing to acquire more than 10 per cent of the Yankee stock.

In its findings and opinion and order,[3] the commission was able to grant all of the approvals requested by applying the long-established and well-recognized

standards of the act. In its opinion, the commission said, in part:

> We are of the view that under the circumstances presented the group approach will contribute to the development of the integrated systems of which each of the applicants is a part . . . In our view it is a proper function of utility systems to participate with others for the purpose of supplying the basic background necessary for determining whether future installations of such a plant in the individual systems are economically practical and in the process acquiring the experience and training in the operation of and management of this type of new installation. The importance of this project, particularly to the sponsoring companies located as they are in a high-cost fuel area, and to their investors and consumers, is best demonstrated by the sharp reduction in fuel costs which the companies anticipate will result from the use of atomic power.[4]

The approvals granted in the Yankee case were founded upon Holding Company Act standards and were not limited to the research and development phase of the project. The Yankee case demonstrated that regional groupings of electric utility companies for the sponsorship of nuclear power projects are possible in circumstances which will enable the commission to grant those sponsors which are not already registered holding companies orders of exemption under § 3(a) of the act.

OTHER projects, however, have not taken this form, no doubt for practical as well as legal reasons. It is not always feasible to locate a nuclear power project so that, as an operating unit, it can be regarded as integrated into the systems of all electric utility company sponsors with regard to which the integration standard is applicable. Also it seems to be regarded in some quarters as important to organize in a manner which would avoid the necessity for any proceeding before this commission. Both of these considerations appear to have been present in organizational planning for the project in which Detroit Edison Company has played a leading rôle.

The Detroit Edison project is organized so as to place ownership of the generating facilities proper—that is, the turbines and generators—directly in Detroit Edison Company. The nuclear reactor, however, is to be constructed and owned by a separate nonprofit corporation, Power Reactor Development Company (PRDC). The members of PRDC are some 21 industrial and utility companies, including Detroit Edison. According to the record, the reactor and generator will be located in Detroit Edison's service area, and PRDC will sell its entire output of heat or steam to Detroit Edison for use in the adjacent generating facilities. No attempt has been made to locate the project so as to be integrated into the systems of the other electric utility sponsors.

THE incorporation of the corporation which will own the reactor separately from the corporation owning the other generating and power production and transmission facilities serves at least two purposes important to the sponsors. First,

it provides some corporate insulation to Detroit Edison from potential tort liability which might arise from the hazard of radiation. Second, it provides a convenient separation for the different financing problems presented by the two major elements of the total project. The turbine and generators owned by Detroit Edison will presumably be financed in a conventional manner. The nuclear reactor component, however, will be financed as far as possible by periodic contributions from the sponsors, to be treated as research expenses, it is hoped, and not capitalized. The peculiar financial problems arise largely from the fact that the total project is expected to cost substantially more than the cost per kilowatt capacity for a comparable modern conventional steam plant. The additional cost is attributable to the reactor component.

A question presented itself, however, as to whether PRDC, the reactor company, was a utility company, and, if so, whether the sponsors or members would thereby become holding companies required to register under, or seek exemption from, the act. In terms of the act, the question turns initially upon whether a heat-producing reactor of the type contemplated is a facility "used for the generation . . . of electric energy." Neither the commission nor any court has had occasion to pass on the question, although the commission's staff has stated to a Senate subcommittee that in its view this type of reactor is such a facility.[5] PRDC's sponsors saw enough substance to the view that PRDC would be a public utility company to seek an amendment to the act which would expressly declare a nuclear reactor company not to be an electric utility company for purposes of the act.[6]

THE commission advised the Senate subcommittee, in commenting on that proposed amendment, in substance as follows:

(1) The corporate ownership and financing of nuclear power-generating facilities should ultimately conform to the standards of the Public Utility Holding Company Act of 1935.

(2) There is no sound basis for encouraging the artificial separate incorporation of the heat-producing reactor portion of the total generating facilities on a permanent or long-term basis.

(3) During the period of experimental development of the new art,

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> however, separate incorporation of the reactor may serve a useful purpose; and such a separate corporation may, under appropriate safeguards, be treated as not an electric utility company.

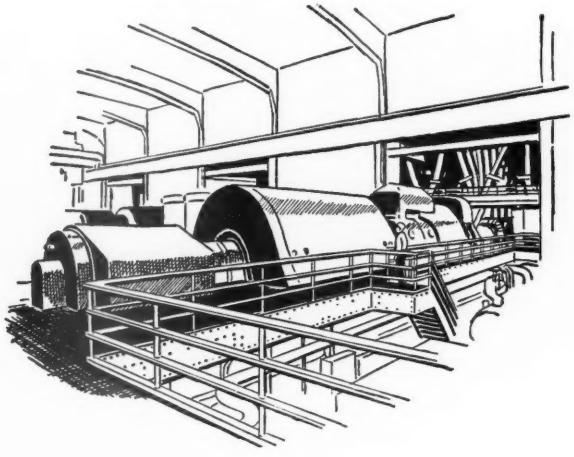
This is the philosophy expressed in the amended Rule U-7 and, to a large extent, in the proposed amendment to the act as finally reported out of committee but not enacted. The rule and the final version of the proposed legislation were not identical, but the differences were sufficiently insubstantial to enable the commission to say that it did not oppose the bill even though it appeared unnecessary.

THE differences lay in whether the reactor company could also own the turbine and generators and still retain nonutility status, and whether the Securities and Exchange Commission or the Atomic Energy Commission should formally determine when the research and development phase of a particular project has ended. As to the latter, administrative convenience should govern. The Securities and Exchange Commission could not by rule impose such a responsibility on the Atomic Energy Commission, but the Congress obviously could if it saw fit to do so. Whichever agency makes the formal determination, the views of the AEC on whether as a matter of fact a given project has ceased to be primarily research and development will necessarily be of critical importance. As to the Securities and Exchange Commission, the basic interest of the PRDC project has been met by Rule U-7, and there is reason to believe that this is as far as it is appropriate for special exemptive treatment to go in an effort to encourage nuclear power development.

Presumably, any project of commercial size is going to be located so as to fit into the system of some electric utility company or companies; and there is no apparent compelling reason why the conventional portion of a project—the turbine and generators—should not be owned and paid for by the company or companies which will get the power. If the conventional facilities are to be owned by more than one sponsor-user, a separate corporation may be necessary, requiring the parents to register under the act or qualify for exemption under Rule U-2 or by order under § 3(a). This does not seem unduly burdensome.

THE commission has stated, however, in its public statement concerning the rule, quoted in part above, that it has by no means closed its mind on this question. Rule U-7, as amended, is limited to companies which do not own turbines and generators because the rule, as limited, covers the demonstrated need, and because extending the nonutility status to a company owning the generators encounters some difficulty with the language of § 2(a)(3).

The amended Rule U-7 exempts a reactor company by virtue of Clause (A) of § 2(a)(3), that the company "is primarily engaged in one or more businesses other than the business of an electric utility company, and by reason of the small amount of electric energy sold by such company it is not necessary in the public interest or for the protection of investors or consumers that such company be considered an electric utility for the purposes



Holding Companies Living under SEC

"APPROXIMATELY *one-fifth of the nation's electric utility business is in the hands of holding company systems registered with the commission under the act and subject to its jurisdiction. It does not appear that this segment of the private utility industry suffers from unreasonable burdens or restrictions. Also, a considerable portion of the industry operates under exemption from the act ordered by the commission under various sections of the act. I do not believe that the act will prove to be an obstacle to nuclear power development even if sponsors are required to register as holding companies.*"

of this title." It is one thing to make the finding required by the last half of Clause (A) with regard to a company which, strictly speaking, sells no electric energy at all, but only heat or steam; it is another thing to make it with regard to a company selling the output of a large generator.

Whether the commission can make such a finding by order in a particular case remains to be seen. It did not appear either necessary or wise to go so far in the amendment of the rule.

SINCE the commission's adoption of the amended Rule U-7 and the failure of the Congress to adopt amending legislation, PRDC and its sponsors have gone forward with their project. After extended study of the amended Rule U-7, the commission's public statement concerning the rule, quoted in part above, and the provisions of § 2(a)(3), PRDC's sponsors decided to seek an order of the commission declaring PRDC not to be an electric utility company rather than to rely upon filing pursuant to the rule. The mat-

ter was set down for hearing, following which the commission issued an opinion and order declaring PRDC not to be an electric utility company and requiring, by way of condition, the annual filing of certain information relevant to the continuation of a nonutility status.[7]

It was not necessary for PRDC or its sponsors to explain on the record in the evidentiary hearing upon which the opinion and order issued why they decided not to rely upon Rule U-7. One reason may have been the belief that nonutility status conferred by order would have greater stability against a possible later challenge by the commission than nonutility status claimed under the amended rule. In practical effect, however, there appears to be little difference between the two situations in that regard.

THE rule, it is true, provides for termination of the status therein provided upon thirty days' notice from the commission. But it is expected that any company which receives such notice and which wishes to assert its continued right to nonutility status would, within the thirty days, file an application for an order under § 2(a)(3). That section provides, among other things, that "The filing of an application hereunder in good faith shall exempt such company . . . from the application of this paragraph until the commission has acted upon such application." So, filing an application in good faith, the company would retain its status until the commission had formally determined upon a proper record after hearing that the company was no longer entitled to the status. Substantially the same thing can occur under PRDC's order. In the opinion the commission said:

> If it should appear to us, after notice and opportunity for hearing, that the business and activities of PRDC have changed in such degree that the company would no longer be entitled, under the provisions of § 2(a)(3), to be considered not an electric utility company, we are empowered, under the provisions thereof, to revoke the order.

The order, like the rule, requires the periodic filing of information so as to enable the commission to decide when it should take steps looking toward revocation of the status.

Certain of the arguments addressed to the Congress by PRDC's sponsors favoring the proposed amendment to the act indicated an apparent misunderstanding of some aspect of the act's potential relationship to nuclear power projects. There seemed to be an assumption that the existence of any degree of jurisdiction in the Securities and Exchange Commission over a project would be unreasonable and burdensome and so would impose an insuperable obstacle.

APPROXIMATELY one-fifth of the nation's electric utility business is in the hands of holding company systems registered with the commission under the act and subject to its jurisdiction. It does not appear that this segment of the private utility industry suffers from unreasonable burdens or restrictions. Also, a considerable portion of the industry operates under exemption from the act ordered by the commission under various sections of the act.

I do not believe that the act will prove to be an obstacle to nuclear power development even if sponsors are required to register as holding companies. The act

is intended to permit companies subject to its provisions to develop in a manner consistent with the interests of both investors and consumers in the light of the statutory standards. Over the years, the commission has administered the act to achieve this end.

Registration under the act by sponsors of nuclear power projects, however, can to a considerable extent be avoided by careful planning. Rather than causing them to become and remain actively registered, some forms of organization may require some or all of the sponsors to seek a commission order of exemption under § 3(a). The need to seek such an order can scarcely be regarded as burdensome to a company which meets the formal requirements of one of the subparagraphs of that section. The exemption process should be especially simple for industrial sponsors who meet the requirements of § 3(a)(3).

THE PRDC project also raised the possibility that, where a nuclear power project is held by a nonprofit corporation whose sponsor-members exceed ten, no one of them may be a holding company within the *prima facie* definition of § 2(a)(7) of the act. This provision, in Clause (A), defines a holding company as any company owning, holding, or controlling, with power to vote 10 per cent or more of the voting securities of a public utility company. Since the members of a nonprofit corporation normally have one vote apiece, where there are more than ten, no one will have over 10 per cent of the voting power, even if its membership be regarded as a security.

There are more than ten members of PRDC, but, as the problem appeared in the testimony before the Senate subcommittee, Detroit Edison Company was unwilling to rely upon being outside the definition in § 2(a)(7), because of Clause (B). That clause authorizes the commission to declare any person to be a holding company upon a finding of actual controlling influence such as "to make it necessary or appropriate in the public interest or for the protection of investors or consumers that such person be subject to the obligations, duties, and liabilities imposed in this title upon holding companies." Apparently Detroit Edison's rôle in PRDC is such that it feared possible future commission action under Clause (B).

I DO not believe that the Holding Company Act should impede rapid progress in the development of nuclear power on a commercial scale. An important admin-

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istrative measure to allay any fear that impediments may arise is our encouragement of early discussions between prospective sponsors of nuclear power projects and the commission and its division of corporate regulation. By being informed and consulted at the planning stage the commission and its staff can help to shape the organization of projects into forms which fully protect the public interest in accordance with the standards of the act without unreasonable or burdensome restrictions upon the electric utility industry.

Footnotes

[1] Holding Company Act Release No. 13221 (July 13, 1956).

[2] The last sentence of § 2(a)(3) of the Public Utility Holding Company Act of 1935 reads as follows: "The commission may by rules and regulations conditionally or unconditionally provide that any specified class or classes of companies which it determines to satisfy the conditions specified in Clause (A) or (B), and the owners of the facilities operated by such companies, shall not be deemed electric utility companies within the meaning of this paragraph."

Clause (A) specifies a company which is "primarily engaged in one or more businesses other than the business of an electric utility company, and by reason of the small amount of electric energy sold by such company it is not necessary in the public interest or for the protection of investors or consumers that such company be considered an electric utility company for the purposes of this title . . ."

[3] Yankee Atomic Electric Co. et al. Holding Company Act Release No. 13048 (November 25, 1955).

[4] The record showed that the sponsors anticipated a fuel cost of 2 mills per kilowatt-hour over the first five years of operation as compared with costs all in excess of 3.6 mills per kilowatt-hour for modern steam plants in the New England area.

[5] Hearings before a subcommittee of the Committee on Interstate and Foreign Commerce, U. S. Senate, on S 2643, 84th Congress, 2d Session (1956), pp. 17n, 29.

[6] The author testified on behalf of the commission before the Subcommittee on Public Works Appropriations of the House Committee on Appropriations to explain the relationship of the Holding Company Act to nuclear power development as well as the commission's views on the need for exemptive legislation. In discussing Detroit Edison Company's desire for legislative exemption despite the views of the commission's staff that the Holding Company Act did not require registration of PRDC's sponsors anyway, the following colloquy occurred between a member of the subcommittee and the author, appearing as chairman of the commission:

"MR. JAMES C. MURRAY [member of the subcommittee]: Would you say, Mr. Chairman, that anybody who predicated his refusal to proceed on a failure to obtain legislation that would exempt him from the Public Utility Holding Company, that his refusal was actually not founded in good faith, it appearing that he is not subject to its terms?

"MR. ARMSTRONG [chairman ot the Securities and Exchange Commission]: Well, I would never want to challenge a person's good faith where he is concerned about interpretation of law, but I would try to allay the fears that he has."

Hearings on Investigation of Atomic Power (1956), p. 206.

[7] Power Reactor Development Co. Holding Company Act Release No. 13364 (January 17, 1957). Subsequently, two registered holding companies have received commission approval under § 7 of the act for guaranties of loans made by certain banks to PRDC. Delaware Power & Light Co. Holding Company Act Release No. 13381 (February 12, 1957), and The Southern Co. Holding Company Act Release No. 13383 (February 12, 1957).

"WHICH system do you think is going to make the strong and self-reliant man—the system under which the state takes charge, or the system under which he takes charge himself . . . rivalry and struggle under equitable laws are the laws of living. Men become strong by defying defeat, by grasping the skirts of happy chance and beating back the blows of circumstance, by cheering in the face of discouragement and shaking off the lure of inauspicious stars, by steering for the lights ahead, turning loss to gain and failure to success."

—ARTHUR MEIGHEN,
Former Prime Minister of Great Britain.

What Are They Teaching about Public Utility Regulation?

To find out what teachers are thinking about on the subject of public utility economics, the author sent out a questionnaire to over three hundred of them. He received a representative number of qualified returns and the result is a very interesting cross section of academic thinking in this important field, analyzed most objectively. There is variety as well as provocative reaction reflected in the numerous quotations selected from this rich source material.

By JOHN D. GARWOOD*

LONG ago a well-known philosopher said: "Tell me today what the philosopher thinks, the university professor expounds, the schoolmaster teaches, the scholar publishes in his treatises and textbooks, and I shall prophesy the conduct of individuals, the ethics of businessmen, the schemes of political leaders, the plans of economists, the pleading of lawyers, the decisions of judges, the legislation of the lawmakers, the treaties of the diplomats, and the decisions of a state a generation hence."

Ideas are like plants; they grow and then wither away, serving as fertilizer material for other plants. Truth is relative to a certain range of assumptions, therefore, to a certain stream of events and conditions of life. All doctrines contain a grain of truth which, under certain conditions of life, become the only valid truth.

History teaches us that economic ideas are not an autonomous field of human endeavor but are strictly related to a whole pattern of life. Economics is not the center of the solar system of man's thought. Economics might better be likened to a small planet revolving around a star of a much higher order.

THE economic ideas of Adam Smith were not conceived independently, as a result of research and study in the British Museum. Rather they were fitted into

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the warp of the whole texture of life, of the social and moral values of their time.

Every economic doctrine, like any institution, has a certain relationship to the environment in which it is rooted and into which it fits. Students have not generally understood the importance of contemporaneous environment on the breeding, development, and decay of certain ideas. In the United States we have evolved over the years a legal category of industry called the public utility. It is a classification readily distinguishable by the limitations imposed on the utility's freedom to buy and sell and earn.

THE U. S. Supreme Court in this country is the final arbitrator on what is or what is not a public utility. In Munn *v.* Illinois (1877) 94 US 113, is found the court's first significant statement as to what was to be considered to be a public utility. "They stand, to use . . . the language of their counsel, in the very 'gateway of commerce' and take toll from all who pass."[1]

From the Munn case the public concept was broadened, refined, and explored in a succession of other cases; *i.e.,* German Alliance Insurance Co. *v.* Lewis (1914) 233 US 389; Wolff Packing Co. *v.* Court of Industrial Relations, 262 US 522, PUR1923D 746; Tyson & Brother-United Theatre Ticket Offices *v.* Banton (1927) 273 US 418; Ribnik *v.* McBride (1928) 277 US 350; New State Ice Co. *v.* Liebmann, 285 US 262, PUR1932B 433; Nebbia *v.* New York (1934) 291 US 502, 2 PUR NS 337, etc.

Thus, the field of public utilities has been defined by the courts. It represents an area where government regulation is accepted as necessary by academicians and practitioners alike. Public policy which involves a degree of government control as well as some parallel ownership of productive facilities represents an area of study where opposing views may become sharply focused.

It is the belief of the writer that what "the teacher thinks" will determine in a majority of instances what the student thinks. Education is not just an assimilation of facts and figures arranged in the order of a filing cabinet. Education represents a combination of the thought processes which shapes attitudes, value judgments, and actions. It thus tends to promote the public welfare under a common philosophy of life.

It was with this thought in mind that the writer addressed the questionnaire noted below to 301 teachers of public utilities in colleges and universities throughout the United States.[2] The questionnaire approach reaches its point of diminishing returns very early. The average one can expect no better than a 25 per cent return. A total of 141 replies or approximately 47 per cent returned their

[1] Munn *v.* Illinois (1877) 94 US 113, pp. 126-132.

[2] The questionnaire was as follows:

1. Name. 2. College where located. 3. Textbook. 4. What is your approach to the study of public utilities; *i.e.,* theoretical, institutional, etc.? Please explain. 5. In the field of atomic energy do you favor placing industrial power development in the hands of privately owned utility companies or should this development be carried on chiefly by the government? 6. What is your opinion regarding power development by multipurpose dams as exemplified by the partnership policy applied in the Pacific Northwest? 7. Would you state your value judgment regarding the effectiveness of commission regulation in the utility field (electric, natural gas, telephone, and urban transit)? 8. How would you evaluate the performance of U. S. privately owned utilities with their counterparts in foreign countries where utilities are nationalized? 9. In your opinion do your students lean to governmental ownership of utility facilities or private ownership of utility facilities.

questionnaires in this study. The fact that the questions were addressed to a special group which had more than a casual interest in the subject matter, undoubtedly explains the better-than-average return.

Public Utilities as a Field of Study

THIRTY-SEVEN schools of the 141 returning questionnaires, teach a course in public utilities at the present time. This represents a figure of 26 per cent.

The field of public utilities is a rather specialized field of study. Hence, junior colleges, teachers' colleges, and the many small liberal arts colleges which dot the country were not included on the mailing list. In terms of enrollment, only the largest colleges and universities were included in the survey. All state universities and large private institutions were included.

The study was selective in that it attempted to contact only institutions where public utilities might likely be taught. Nevertheless, it appears that in this group only 26 per cent offer a course in the field. If this percentage figure is applied to the 301 questionnaires mailed, it appears that not over 75-80 colleges or universities the country over offer a course in what was once a fairly popular field of study.

The fact that it is listed in the college catalogue does not necessarily mean that a course is being currently offered. It may mean that it has been offered and because of inertia on the part of the department head or because he wishes to display a wide offering of courses, it has not been removed from course offerings. A check of college catalogues is not an infallible method of ascertaining what is being taught.

Some of the larger colleges and universities currently not teaching courses in public utilities include the University of Cincinnati, University of Florida, Pennsylvania State University, University of Delaware, Northwestern University, Texas A and M, Drake University, University of South Carolina, University of Buffalo, University of Virginia, University of Michigan, Wake Forest College, Tufts University, Long Island University, Catholic University of America, Brooklyn College, Duke, University of New Hampshire, Kansas State, Kansas University, Marquette University, University of Idaho, Brown University, Creighton University, Oklahoma A and M, University of Connecticut, University of Missouri, Xavier University, etc.

FURTHER evidence of the declining importance of public utilities in college

¶ "EVERY *economic doctrine, like any institution, has a certain relationship to the environment in which it is rooted and into which it fits. Students have not generally understood the importance of contemporaneous environment on the breeding, development, and decay of certain ideas. In the United States we have evolved over the years a legal category of industry called the public utility. It is a classification readily distinguishable by the limitations imposed on the utility's freedom to buy and sell and earn.*"

curriculum is indicated by the dearth of textbooks in the field.

In the field of preparation, it appears that relatively few doctoral dissertations are being prepared in the public utility field. Those who do qualify themselves in the field are likely to seek employment in industry or with the government.

What has caused this decline of interest in this subject matter field? The study indicated a number of reasons:

1. It is said that public utilities is too specialized a course for small departments of economics and business.

2. It seems to be the feeling among many respondents that it becomes a question of alternatives. Other courses such as labor, public finance, taxation, money and banking, national income analysis, etc., are in demand in keeping with institutional changes in our economy. It was observed that social science students flow to courses most closely related to current economic and social problems.

3. There are not large numbers of staff members who have preparation in the fields. Academicians for obvious reasons prefer to instruct in areas where they specialize. They will not "push" a course in which they have little training or interest. Individuals who are qualified to teach public utilities often seek the larger salary of industry.

4. It was alleged that public utility regulation is now widely accepted and offers little challenge to a student of economics. Thus, the subject and manner of regulation have been established by court and commission.

5. In the field of economics the course in business and government usurps a portion of the public utility field. A number of respondents noted no course in public utilities but replied that a course dealing with business and government covered a portion of the utility field. The emphasis given to public utility problems in such a course differs considerably. In some textbooks a couple of chapters suffice. In others the emphasis may amount to 25 per cent of the course.

This course offers a good "out" for those economic departments which wish to offer some phase of public utility study but which do not wish to devote a course or courses in the area.

To sum it up, it appears that at the present time, public utility economics is offered as a field of study in chiefly the major universities, yet many of them no longer carry the course. One respondent from one of the most prominent state universities of the country replied that its teacher of public utilities had passed away and his replacement had not been secured. Hence, the course was not currently offered although it was planned to continue the course during 1957-58. It is inconceivable to think that the field of taxation or public finance or money and banking would receive this treatment in a university enrolling more than 15,000 students.

In the smaller schools where the course is still being taught, it is likely that some one with strong training in the field urges its retention in the curriculum.

The Textbook

Of the 37 colleges and universities offering a course in public utilities, 18 use Eli Winston Clemens' *Economics*

What Teachers Think about Atomic Power

"THE world's new source of power, atomic energy, is rapidly being developed and exploited by the nations of the world. The initial development in the U. S. was governmentally inspired and directed. Shall this source of energy remain in government hands for development or should it be shifted to private enterprise for maximum development? What do 'the professors' think? It is likely that ideas engendered in the classroom will ripple through the next several generations of college students. Although only thirty-seven of the 141 respondents offered a course in public utilities yet sixty-three replied to the question dealing with the development of atomic power."

and Public Utilities. The second most widely used book (seven users) is that of Emery Troxel, *Economics of Public Utilities.* Other books used include Herman H. Trachsel, *Public Utility Regulation;* Eliot Jones and Truman Bigham, *Principles of Public Utilities;* Irston R. Barnes, *The Economics of Public Utility Regulation;* C. W. Thompson and W. R. Smith, *Public Utility Economics;* L. R. Nash, *Public Utility Rate Structures;* and Clair Wilcox, *Public Policies toward Business.*

It should be stressed, of course, that this entire study and analysis are confined to public utility *economics.* In the law schools of the various universities, specialized courses on the law of public utility regulation are carried on with an entire different group of text or case books. *Cases on Public Utility Regulation,* by Francis X. Welch, Public Utilities Reports, Inc., Washington, D. C. (third edition, 1946), is the leading book in the law school field.

If these foregoing figures may be taken as a guide, it seems that approximately

half of our economics and business administration teachers use Clemens. Further, if we may assume that public utilities is offered as a course in only 75-80 colleges and universities throughout the country, then it is likely that the market for such a book is very limited. Even the best seller would probably not be used in more than forty institutions.

It is little wonder that not many books are produced in this field.

Approach to the Study of Public Utilities

THE institutional approach is widely used in public utility teaching. This is the approach used by Clemens in his book, *Economics and Public Utilities.* Professor Clemens, unlike many writers, sets forth his approach to his subject with great clarity.

Thus:

> The institutionalists are more interested in patterns of collective action. These patterns are not to be deduced *a priori* for they depend upon the existing economic and cultural patterns of any society. To explain this pattern resort must first be made to history, psychology, philosophy, political science, sociology, and anthropology.
>
> For our purposes institutions are those humanistic means by which economic forces are made effective. These means fall roughly into five categories:
>
> 1. Collective organization such as labor unions, political parties, corporations, government bureaus, public utility commissions, etc.
> 2. Patterns of thought or modes of thinking: strong and prevailing beliefs, accepted more or less without question.
> 3. Codes of working rules through which society or a collective group achieves a certain stability. Working rules may include such formal bodies of law as constitutional or statutory law, rules and regulations for the guidance of a corporation's employees, or even informal methods of procedure accepted by custom.
> 4. Knowledge or know-how—the accumulated knowledge and experience of any individual or group or of society as a whole.
> 5. Human beings themselves—the human factor in any plan of organized action.[3]

THIS, in brief, is the institutional approach. It explains its subject matter by examining all the forces which bear upon a decision, an institution, or a value in bringing out a change or a continuance of the status quo.

Professor Clemens, who is casting his shadow over the field in the matter of approach, notes that his viewpoint is the same as that which Professor Glaeser, Professor Commons (University of Wisconsin), and others summed up as a "Belief in the blending of education with government and pragmatic idealism with a sense of public purpose." This pragmatic approach stems from the teachings of Professor Commons who first taught public utility economics as a specialized field of study in 1907.

A good 80 per cent of the respondents utilize solely the institutional approach or utilize it with a theoretical emphasis. In the field of pricing and rate regulation

[3] Clemens, Eli Winston, *Economics and Public Utilities,* Appleton-Century-Crofts, Inc. 1950. p. 5.

many teachers refer to economic theorizing in explaining how this occurs. In the explanation of the allocation of resources theoretical models find a place.

The historical approach is used by a number of teachers; *i.e.*, how and why regulatory processes have evolved and the results of such a process.

The case method is also employed. The development of the public utility concept has been in the courts and refined by the commissions.

One teacher notes an eclectic approach with emphasis upon legal relationships.

A few teachers approach the subject through the media of current problems which are studied in the current journals. This places weight upon current legislation.

Development of Atomic Power

THE world's new source of power, atomic energy, is rapidly being developed and exploited by the nations of the world. The initial development in the U. S. was governmentally inspired and directed.

Shall this source of energy remain in government hands for development or should it be shifted to private enterprise for maximum development? What do "the professors" think? It is likely that ideas engendered in the classroom will ripple through the next several generations of college students.

Although only thirty-seven of the 141 respondents offered a course in public utilities, yet sixty-three replied to the question dealing with the development of atomic power. Thirty-five favored atomic development through private utilities, sixteen favored governmental control and ownership of developmental facilities, six believed the development should be a joint project of government and private industry, while seven had no opinion.

Those favoring private development reasoned as follows:

1. My fear of unbridled government bureaucracy forces me to no other choice than private operation and ownership under adequate and efficient functioning of that one function which the government is supposed to do: "govern" (*i.e.*, regulate).
2. Government ownership and operation generates more serious problems for the economy of the nation than it solves.
3. The consumers who will benefit from the use of atomic energy should bear the costs of its development and use. The public should not have to subsidize the development of atomic en-

¶ " 'PRIVATE *ownership 10-1.' 'Four to one in favor of private.' 'Scepticism toward government ownership seems to me to be more general.' 'To the extent one has business majors with a middle-class background, private ownership tends to be favored.' A number commented that students were singularly uninformed in the area. In some instances students from the Pacific Northwest and the TVA area, expressed views favoring governmental ownership.*"

ergy for industrial use through taxes or maintain the operation of atomic industries through subsidization.

4. The issue here is rapid development, whichever could do it fastest would best serve national interests.

5. I prefer private development because of its dynamic character.

6. I would favor private development but with the government ready to take over at the first sign of lack of private initiative.

7. When, or if, we are in another war government probably would need all the experience and capacity which private enterprise could supply to supplement government action.

8. Power will be distributed by private utilities, why not allow them to generate it?

9. My general philosophy is that the government should enter a field only when it seems that the interest of society requires such intervention. In the early developmental stage of atomic energy, it seems that society benefits may be larger than private marketable benefits. For this reason government participation in the basic research seems necessary. Once we pass this stage, I favor private development of atomic power.

10. I like to refer to the Japanese experience in developing western-style industry in the nineteenth century. Because of the machinery set up in connection with national security and defense, I believe that a law which presses for the development of "pilot plants" by the government to be followed by disposition of these plants to private utilities would be best. In time, the development of plants in new areas might be completely privately initiated and carried out.

11. Private organizations are more efficient and effective. Also it would make for a slowing down of growing Socialism in the U. S.

12. We should use the drive, incentive, initiative of the private sector to the maximum consistent with the general welfare. No one has shown me a really good reason for government monopoly in the area.

13. Keep overtones of politics out.

14. This is the only course consistent with the traditional American approach to power use.

15. I see no advantage to allowing a government monopoly to go unregulated and I know of no way to maintain effective control over a government agency.

16. This would place the government in the power business in a big way. No!

17. The only excuse for the government to enter the field is the inability or the unwillingness of private enterprise to do the job.

THE case for government development was stated as follows:

1. The federal government financed the tremendous cost of research and development initially required.

2. Atomic power will long play a strategic rôle concerning international politics.

3. Power companies would logically come in for greater control as public utilities if given greater responsibility for developing industrial power via atomic energy.

Like Teacher Like Student

". . . the field of public utilities has been defined by the courts. It represents an area where government regulation is accepted as necessary by academicians and practitioners alike. Public policy which involves a degree of government control as well as some parallel ownership of productive facilities represents an area of study where opposing views may become sharply focused. It is the belief of the writer that what 'the teacher thinks' will determine in a majority of instances what the student thinks. Education is not just an assimilation of facts and figures arranged in the order of a filing cabinet."

4. The federal government is in a position to emphasize ownership by its ownership of the sources of energy.

5. It is a costly project. Only large firms could undertake it and this would make for greater concentration of power in the hands of few companies.

6. It would eliminate duplication of effort.

7. Place the main responsibility for peacetime atomic energy development in the hands of government to obtain the widest possible distribution to the public of the benefits of industrial atomic energy development.

8. Patents flowing from federally financed research should not be given to private utilities.

9. We believe it to be a perversion of political morality for private utilities to be the beneficiaries, reaping when they have not sowed and actually handicapping the public welfare by their feeble developmental policies.

10. Nuclear waste problems dictate government ownership.

11. Government yardstick plants would be useful.

12. Because defense is so important, nothing should be allowed to put national security in jeopardy. It seems that atomic energy is to be our chief

war weapon so the government should keep control.

THOSE favoring a joint atomic development program note that

1. I see no reason why both public and private resources should not be used in the development of atomic facilities. Both are needed—the financial resources of the federal government plus the drive of private enterprise.

2. Let's protect the consumer by joint action.

3. Fullest development can come only through joint endeavor.

4. The endeavor should be a joint one with a pooling of knowledge—a free interchange of efforts, ideas, and conclusions.

5. A middle way is needed. Private industry is not ready financially to develop atomic energy and I would not want a governmental monopoly born.

6. Both — checks and balances through alternative modes of development competing for use.

The ideas expressed above represent a cross section of academic thinking from coast to coast by those who are presumably most skilled in the public utility field in academic circles. It seems likely that the classroom blackboards will contain many of these concepts.

Power Development as Exemplified By the "Partnership Policy"

THERE was a variety of opinion on this particular question. Twenty-seven favored multipurpose dams, twenty-two opposed, while fifteen expressed no opinion.

Those favoring the partnership policy stated the case as follows:

1. The partnership policy appears to be an equitable "out" of the public *versus* private controversy. The contest between public and private is blocking many worthy projects.

2. Private power tends to "cream" off the more lucrative possibilities. The partnership doctrine could utilize the private initiative and combine it with public direction.

3. Federal ownership of TVA offers no inherent economies not fully available under private ownership. The lower rates offered by government operation result from a subsidy of capital charges and federal tax exemption, luxuries we cannot afford in the present state of the federal budget.

4. If we are going to continue to have large federal hydro projects such as TVA and Bonneville, then we need to repeal or amend § 10, a, b, and c of the Federal Power Act.

5. The partnership policy would appear to be the way out from continued federal borrowing where private corporations are able and willing to finance cost of power facilities. Various aspects of the partnership proposal need clarification, such as revenues in lieu of local taxes, co-operatives, and low-cost power, etc.

6. The partnership policy is sound in theory. Most resource development in the U. S. has resulted from a combination of public and private effort.

7. With the partnership policy power generation could pay the full economic cost, including taxes.

8. Partnership agreements prevent a government monopoly.

9. This is a promising development and one that should be continued provided some method can be devised for appropriate cost allocation.

10. It is the only logical development consistent with our traditional utility philosophy.

11. Some multipurpose dams in the Pacific Northwest seem to involve excessive expenditure for irrigation and navigation with the costs hidden in the power sector. Including private companies in the systems will help to make plain the separate costs and reduce the waste which some of the public projects have involved.

THOSE who opposed the multipurpose dams as exemplified by the partnership policy made the following comments:

1. Let all utility power development (TVA, Columbia river, etc.) be wholly in the hands of private firms regulated as utilities. I would recommend that the government sell its holdings to private firms. There is a need for the development of irrigation, drainage projects, etc., in the area of the dams. In the event the utility firms do not wish this responsibility let the government do it through private default.

2. The partnership policy is not likely to be good for anyone except the power interests. Private people are not very interested in any of the purposes other than electric production.

3. I have not much sympathy for the partnership policy, believe it to be inadequate at best; at worst phony.

4. The concept of a partnership is nonsense. Multipurpose dams are not profitable structures in any sense except the social sense.

5. The partnership policy has, in my opinion, nothing to justify it except political expediency.

6. Thus far the multipurpose dam has been largely fraud and pretense since multipurpose can serve neither.

7. Objectives of the nation and private power companies are unlikely to coincide.

8. Private development much preferred to government integration. The government should enter no more than necessary.

9. Division of ownership will not be for the best interest of either private or public.

10. The history of multipurpose dams indicates it is almost impossible to determine the actual costs of the utility services. This situation lends itself to political exploitation of many multi-

¶ *"THE U. S. Supreme Court in this country is the final arbitrator on what is or what is not a public utility. In Munn* v. *Illinois (1877) . . . is found the court's first significant statement as to what was to be considered to be a public utility. 'They stand, to use . . . the language of their counsel, in the very "gateway of commerce" and take toll from all who pass.' From the Munn case the public concept was broadened, refined, and explored in a succession of other cases . . ."*

purposes which cannot be justified by their own merit.

11. I doubt that the so-called partnership policy will work in practice because of the difficulty in allocating joint costs and the nonacceptance of the idea by many people. Local interests prefer the low rates of government projects to encourage industrial plants to locate in the area. They are not so concerned with the arguments of tax injustice to private utilities.

12. From an engineering point of view, there is no such thing as a multipurpose dam.

Thus speak U. S. public utility academicians on the partnership concept.

THE leading textbooks in the field are of interest. In his preface Clemens cites "a belief in continuous disciplined competition between public and private ownership although not necessarily of the birch rod type." In the concluding chapter in his book Clemens states:

> Within the electric utility industry the tide of public ownership has risen high. To what extent it will recede, if it will recede at all, is difficult to say. But significant elements in the pattern of American thinking, institutions in themselves, warn us against extending the historical trend too far in the future. . . .
>
> The first is the traditional American distrust of centralization of governmental power—indeed a distrust of any great power in government. . . .
>
> A second element in the pattern of American thinking that may block the development of public projects is the well-fostered belief in the efficiency of private enterprise and the inefficiency of government enterprise. . . .
>
> The third element in the pattern of American thinking that may prevent the fullest development of public ownership is the traditional belief in competition—a belief that is much stronger than the belief in either government ownership or government regulation. Such a pattern of thought may stop the drift towards public ownership once the public project has made its competitive influence felt in a real and certain manner. It is not beyond belief that the privately owned utility industry may insist that its healthy survival is necessary as a yardstick to measure the performance of public ownership. . . .
>
> What can we conclude about public *versus* private ownership? Enough has been said to demonstrate that public ownership can be successful if it has real leadership and provided the institutional environment is favorable. But where the public is nothing more than an inert, supine mass, incapable of the positive measures necessary to secure and protect good management, public ownership is likely to fail, and the last position is worse than the first. It may well be questioned whether the American people are yet willing to abandon a traditional institution—the belief in competition—in favor of monopolistic public enterprise. Private enterprise must remain vigorous to afford a continuous competitive challenge and an ever-present alternative under conditions of fair competition.[4]

AUTHOR Troxel in his concluding chapter observes that

[4] *Ibid.*, pp. 678-680.

Some people reject the public ownership movement of the federal government because it is based in large part on political feelings. Like businessmen, they want careful consideration of the prospective revenue, management, usefulness, and tax incidence of each improvement. Attention to economical investments and efficient management is commendable; and Congress can use more of it. But municipal, state, or federal production of electricity or any other commodity obviously cannot be disassociated from the political environment that allows it to develop and to exist. At any rate, the general acceptance of public ownership is increasing, and a continuing expansion of the federal program seems to be assured. Persons who receive service from the several projects naturally give strong support to the program; and other voters either anticipate similar improvements in their regions or are not sharply opposed to public electric service. A choice between private and public production of electricity is not even a minor issue in presidential campaigns. More water-control improvements, combining electricity production with other services, will be built. Federal government departments, regional organizations, and local civic groups will propose many more undertakings; and additional projects will be constructed as general public improvements, or as parts of a job-creating program of public works. These undertakings will lead the way toward the social objective of widespread consumption rather than the private end of maximum profits; they will start a new era in public utility service despite the social inefficiencies caution, and business-mindedness of their political sponsors and managers.[5]

Clair Wilcox puts it as follows:

> The most serious obstacle to a further extension of public ownership and operation lies in the state of public opinion. The American people, in years of prosperity, look upon public enterprise with suspicion and upon private enterprise with admiration or, at least, with tolerance. . . .
>
> Most popular discussion is concerned, not with the socialization of private enterprise, but with the privatization of public enterprise. And the swing of the pendulum is unlikely to be reversed by anything less than a major depression or another war. . . . The direction of movement in the United States today is from public to private enterprise.
>
> . . . There is no clear rule that can be laid down to govern such a choice. Public enterprise and regulation both have their advantages and disadvantages. It cannot be said that one would always work better than the other. It may even be impossible to predict, with any confidence, which would be better in a particular case. One point, however, can be made. It is desirable to have the two controls in operation side by side, so that each may be stimulated by the example of the other, and both judged by comparing their performances. In this way, competition may operate to serve the public interest.[6]

[5] Troxel, Emery, *Economics of Public Utilities*, Rinehart & Co. New York, 1947, pp. 799, 800.

[6] Wilcox, Clair, *Public Policies toward Business*, Richard Irwin, Inc. Chicago, 1955, pp. 726, 760, 763, 856.

Briefly, then, this appears to be the philosophy of three books which (as far as the writer can ascertain) dominate the field as textbooks at the present time.

Effectiveness of Commission Regulation

ONE of the most widely discussed subjects in public utilities is that of commission regulation. Below is summarized the thinking of the teachers in the field:

1. Federal commissions are more effective than state commissions which are apt to be handicapped by weak or ineffectual laws. They may lack adequate funds for investigation along with shortage of personnel. This is unfair to the public as well as the utility.

2. Commissions are growing in stature and their accumulated knowledge will prove even more effective than in the past. The Hope Natural Gas Company case in my opinion has raised generally the effectiveness of the various commissions.

3. It is my impression that commission regulation has been most effective as follows (in order of decreasing effectiveness): urban transit, electric, telephone, natural gas.

4. Commissions may be seriously handicapped because of their political nature.

5. Less than perfect, better than either nonregulation or complete nationalization. There is need for a wider recognition of the objectives of regulation, more independence of the commission, greater strength in personnel, and greater public interest in the results.

6. Utilities are more protected than the public is protected from them.

7. Need improvement especially where commissions are tied to certain valuation concepts.

8. Only moderately successful in protection of the consumer interest and that judgment weakened in view of the range of differences in commission effectiveness in terms of knowledge of problems and technical aspects of utilities, willingness to enforce regulatory law.

9. The citizens of a state get the kind of government the majority wants. When commissions are given adequate budgets and adequate authority (Wisconsin, for example) their efficiency is on a par with other divisions of government.

10. Reasonably effective in all but a few states.

11. Effectiveness varies from field to field. It is common knowledge that urban transit industry was ruined through its regulation.

12. I recommend a careful reading of the book, *Regulating Business by Independent Commissions* by M. H. Bernstein, Princeton University Press.

13. In general, regulation is becoming inadequate.

14. State regulation is effective in terms of the willingness of the state legislatures to give commissions authority and reasonably adequate appropriations to carry out their purpose.

15. Commission regulation tends to suffer from two opposite problems—in some cases it has tended to be much too severe, preventing utilities from earning an adequate rate of return and taking up a good deal of the time and energy of the utility officers in prolonged hearings. In other cases it has been much too lenient.

16. For legislative and quasi-judicial functions, the commission is reasonably effective in the utilities field. It is not effective as an administrative body.

17. Not too effective. The commission often becomes the spokesman for the industry it is supposed to be regulating.

18. With the exception of natural gas, there has been greater sense of responsibility on the part of utility management, hence, the task of commissions has been made easier.

19. Ineffectual prior to thirties, improving all the time.

20. Regulation of public utilities by commission is the outstanding example of successful government regulation of economic activity in this country.

ALTHOUGH there was not complete agreement, probably 90 per cent of the respondents believed commission regulation to be reasonably effective although the commission "hand" should be strengthened in terms of budget and personnel. The comments above are representative of the thinking of public utility teachers of the U. S. on commission effectiveness.

Professor Eli Clemens in his widely used book evaluated commissions as follows:

> With the development of the field of public administration the administrative commission must be viewed as an economic and political institution like corporations, become going concerns, the multiple products of exterior and interior forces. From the exterior a commission is shaped by the political character of the people of the state, by the development or fortuitous uncovering of great leaders or administrators, by history and tradition, and by the ameliorating and modifying influence of other institutions such as labor unions, political parties, farm organizations, the press, and educational, religious, and judicial systems.
>
> . . . Internally, a commission is shaped by the character of its members and staff and by the way they work together. Effectiveness depends in part upon its working rules and procedures. Where traditional relationships are good and firmly established each member works in confident knowledge of his exact position in the whole. Where the working rules are bad, action is stultified. Where procedures and methods are in a state of flux there may be some temporary inefficiency; a commission must sometimes go through a "shaking-down" period. Thus the concept of a going commission is similar to that of a going concern.[7]

ANOTHER author, Herman H. Trachsel, comments as follows:

> There seems to be a widespread conviction that regulation of public utilities by state public service commissions is far less effective than it should be if the public interest is to be adequately protected. The aims and purposes for which the commissions were established have not been realized. In fact, many critics go so far as to say there has been a complete breakdown in state regulation.[8]

[7] Clemens, Eli Winston, *Economics and Public Utilities*, p. 421.

[8] Trachsel, Herman H., *Public Utility Regulation*, Richard D. Irwin, Inc. Chicago, 1947, p. 146.

Troxel makes the following statement:

> Although state commission regulation of utility industries is an improvement on what local governments and franchises can provide, it is still, as the organization deficiencies described here show, far short of good social control. . . . the organization of state regulation is noticeably static, nonaggressive, and incomplete.[9]

Performance of U. S. Privately Owned Utilities versus Nationalized Utilities Abroad

THERE is not much to be said about this particular question. Few ventured an opinion. Those who declared themselves believed U. S. privately owned utilities to be as efficient or to be superior in performance to foreign nationalized utilities. No one expressed a view to the contrary.

A dearth of information in this area characterized the answers submitted to this question.

Government or Private Ownership of Utility Facilities—Student Opinion

The response was with the exception of one respondent—privately owned. This is not to say, however, that some students do not favor governmental ownership—some do. On balance, however, it was for a system of privately owned utilities publicly regulated.

"Private ownership 10-1." "Four to one in favor of private." "Scepticism toward government ownership seems to me to be more general." "To the extent one has business majors with a middle-class background, private ownership tends to be favored."

A number commented that students were singularly uninformed in the area. In some instances students from the Pacific Northwest and the TVA area, expressed views favoring governmental ownership. On the other hand, "Kindly remember that this answer comes from a federal tax-paying not tax-receiving (on balance) Pennsylvania. Private ownership and operation is strongly favored here and this attitude is found among my students."

Conclusion

Teachers, textbooks, and classrooms mirror a generation's economic and social philosophy in the present and point to the future. Some may regard the comments expressed by the "professors" as a "Phoenix arising from the ashes or a dove reappearing after many days." Be that as it may, this is the thinking of those who frequent the campuses in the U. S. today.

[9] Troxel, Emery, *Economics of Public Utilities*, pp. 87, 88.

". . . this Country is moving rapidly away from individualistic capitalism toward a very peculiar mixed system in which the government exercises a control over individual earnings not only through the punitive graduated income tax, but by various social controls which leave little to individual judgment."

—GEORGE E. SOKOLSKY,
Columnist.

Our Defective Federal Project Power Marketing Law

In the first of his 2-part series, this author described the 30-year contract which a former Secretary of Interior, Oscar Chapman, signed in 1952 to furnish power to Reynolds Metals Company in combination with Arkansas Power & Light Company. In this instalment, the author discusses what can and should be done about the entirely unworkable provision (§ 5) of the Flood Control Act, which has caused the parties concerned so much difficulty so far and will probably cause more trouble before Congress passes remedial legislation.

Part II. *What Can Be Done about It?*

By ROBB M. WINSBOROUGH*
VICE PRESIDENT, MIDDLE WEST SERVICE COMPANY

It is difficult to see how Arkansas Power & Light Company and Reynolds Metals Company could have done anything more than they did do to attempt to make certain their actions were legal. First, they were urged on by their own government. Second, they dealt with a legally constituted authority, the duly appointed Secretary of the Interior who is authorized under § 5 of the Flood Control Act to be the marketing agent for hydroelectric energy from reservoir projects. Third, they successfully obtained the approval of the Federal Power Commission which is specified as the agency which must give approval and confirmation to the rates in power contracts of the kind they were making. Fourth, Reynolds Metals Company had the contract reviewed by competent attorneys of banks, insurance companies, and financial firms that were interested in lending money for the construction of the aluminum facilities for which a legal long-term power contract was a critical essential. Fifth, Reynolds Metals Company and Arkansas

* For additional note, see "Pages with the Editors."

Power & Light Company each invested substantial sums of money to carry out the contract they had made to perform an act which the government desired them to perform. The Department of the Interior made seven separate supplemental agreements to the contract, each of which implied the continuing legality and validity of the agreement.

If § 5 is so ambiguous as to permit repudiation of a contract made with such care and such evident good intentions by all parties to the contract, including the government, then § 5 is a bad law and should be repealed and replaced by a law that is not subject to such contradictory interpretations.

For different reasons, revision and clarification of § 5 is also the recommendation of the Comptroller General of the United States.

The Speaker of the House of Representatives and the President of the Senate each received copies of the Comptroller General's audit report of SPA for the fiscal year 1955. It was the first such audit to combine power-generating, marketing, and related activities of the Corps of Engineers and the Southwestern Power Administration in the Arkansas, White, and Red river basins, including the Whitney (Texas) project.

In the letter of transmittal which accompanied the audit report, the Comptroller General of the United States says:

> The report contains matters for consideration by the Congress having to do with allocations to power and nonpower purposes of construction costs of the projects.
>
> The report also shows that power revenues have not met the requirements of § 5 of the Flood Control Act of 1944.
>
> Also, the report includes recommendations to the Chief of Engineers and the Secretary of the Interior on establishing policies jointly for accounting and financial practices necessary to present fairly the financial position of and results from the government's water resource operations.

The area in which the Southwestern Power Administration operation occurs can be roughly described as the rectangle formed by the cities of St. Louis, Kansas City, San Antonio, and New Orleans. The area is about 375,000 square miles, with a population of roughly 22.5 million people. SPA serves the total or partial power requirements of about 2 million of this population.[16] The multipurpose projects authorized in the area will have an ultimate installed generating capacity of 1,774,035 kilowatts.[17] At the time of the Comptroller General's audit for the fiscal year ended June 30, 1955, 426,000 kilowatts had been installed and 175,000 kilowatts were being installed.

The principal findings and recommendations of the Comptroller General include these:

"1. *Allocation of construction costs in multiple-purpose projects.* Laws forming the basis for the federal water resources program do not provide precise policies or criteria to be applied for allocation of construction costs of multiple-purpose projects and for the establishment of rates for commercial power. For most authorizations of multiple-purpose proj-

ects where one agency is authorized to construct the project and another agency is authorized to market the products of the project, the agency ultimately responsible for making the allocations to purposes is not specifically designated. . . . Section 5 of the Flood Control Act of 1944 provides that the Federal Power Commission shall confirm and approve rates for power generated at Corps of Engineers projects, but designation of the commission for making the allocations of construction costs has been made specifically in only a few project authorizations.

"We believe that the lack of policies and criteria to be applied in making allocations of construction costs and existing confusion on responsibility for making these allocations should be resolved by legislative action.

"ACCORDINGLY, we are recommending that the Congress provide policies and criteria to be applied for making allocations of construction costs of multiple-purpose projects, the results of which serve as the basis for establishing rates for commercial power. We are recommending also that the Congress designate specifically the agency to make the allocation where one agency is authorized to construct the project and another agency is authorized to market the products of the project. The Congress may also wish to clarify the rôle of the Federal Power Commission to make these allocations for future multiple-purpose projects, including power.

"2. *Revenues not sufficient to cover all costs.* As in previous years, the revenues in fiscal year 1955 were not sufficient to cover the costs of producing electric energy and to amortize the government's investment applicable to power in accordance with the requirements of § 5 of the Flood Control Act of 1944.

"3. *Costs incurred by Corps of Engineers in preliminary surveys and investigations not included in project cost.* Under the accounting procedures of the Corps of Engineers, costs incurred in conducting preliminary investigations and surveys are not included as part of the costs of the project, when built. To provide for an adequate disclosure of total project costs and to permit consideration of all proper costs for allocation of total construction cost to purposes, we are recommending that the Corps of Engineers include an appropriate share of these costs as costs of the project.

¶ *"THE area in which the Southwestern Power Administration operation occurs can be roughly described as the rectangle formed by the cities of St. Louis, Kansas City, San Antonio, and New Orleans. The area is about 375,000 square miles, with a population of roughly 22.5 million people. SPA serves the total or partial power requirements of about 2 million of this population. The multipurpose projects authorized in the area will have an ultimate installed generating capacity of 1,774,035 kilowatts."*

"4. *Revenues paid over to states not charged to projects.* Under the provisions of the Flood Control Act of 1941, as amended (33USC701C-3), 75 per cent of the moneys received during any fiscal year on account of the leasing of lands required for flood control, navigation, and allied purposes are returned to the states in which the lands are located. The gross revenues are credited to projects in the accounting records of the district office of the Corps, but the payments to the states are disbursed and recorded at the office of the Chief, Washington, D. C.

"We are recommending that the revenues from reservoir lands paid over to states be recorded in the accounts of the projects at the district offices." (The audit report shows on page 38 that operation and maintenance expense of the projects in SPA were improperly reduced by $733,040 because of the mishandling of this item.)

"5. *Accounting and financial policies.* The financial statements included in this report present for the first time on a combined basis all the assets and liabilities of the multiple-purpose projects (including those under construction) of the Corps of Engineers in the Arkansas, White, and Red river basins, including the Whitney project and the Southwestern Power Administration, the marketing agent. However, until construction cost allocations to power and nonpower purposes are final and the Corps of Engineers and the Department of the Interior reach agreement on certain accounting and financial policies, financial statements cannot be presented that fairly show the financial position and financial results of operations of the Arkansas, White, and Red river basins power system and related activities.

"We are recommending that the Chief of Engineers and the Secretary of the Interior jointly establish comparable policies and apply practices thereunder uniformly and consistently on:

a. Allocations to power and nonpower purposes of joint costs and expenses of operating and maintaining multiple-purpose projects.

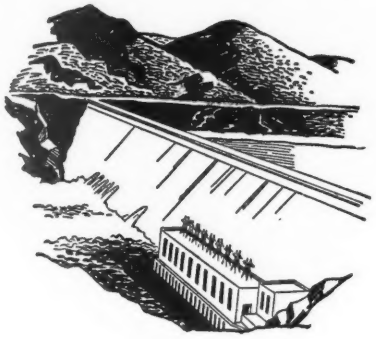
b. Provisions for depreciation on plant in service, and allocation of the provision on multiple-purpose plant to purposes.

c. Computation and recording interest on the federal investment in commercial power and municipal and industrial water facilities.

"The establishment jointly of comparable policies and effective application of them by each agency is necessary before financial statements of the government's water resource operations can be fairly presented.

"General agreement has been reached between the Department of the Interior, Corps of Engineers, Federal Power Commission, and General Accounting Office on the use of simple interest during construction and the proportionate method of accounting for the operation of joint facilities on multiple-purpose projects.

"We are recommending also that financial statements be designed specifically to show the status of repayment of the federal investment based on memorandum records for schedule repayment requirements."



SPA's Sales Problem

"THE basic reason why SPA is in financial trouble is that SPA has been trying to sell something it does not have. It has been selling electric service on the basis of 4,000 to 5,000 hours' use of generating capacity when its available water will only provide about 2,000 hours' use. SPA has been doing this because it is trying to fulfill a utility responsibility instead of marketing surplus hydroelectric power, as § 5 provides. The Comptroller General has suggested the only available cure for this difficulty. It is a legislative remedy by the Congress specifying sound fiscal and accounting practices for multipurpose projects in place of the ambiguities and the discrimination now embodied in § 5."

ON pages 22 and 23 of the audit report of SPA the Comptroller General again said:

> At the present time the federal water resource program is based on a large number of laws that are administered by several agencies. These laws do not provide uniform policies or criteria that are fundamental in carrying out the program.
>
> We believe that the water resources program could be more effectively administered if the Congress provided policies and criteria to be applied for allocation of costs of multipurpose projects, the results of which serve as the basis for establishing rates for commercial power. In addition to establishing policies and criteria for cost allocations, we believe that the new legislation should also provide for (1) period of repayment of construction costs, (2) rates of interest, and (3) subsidies to nonpower purposes.

The Comptroller General's audit report of SPA has presented sufficient detailed proof of the inadequacy of the present federal laws concerning the water re-

sources program. No government agency has the clear-cut responsibility for allocating construction costs to various portions of the multipurpose projects. Neither has Congress set forth the principles which should be applied in making the determination.

SECTION 5 of the Flood Control Act of 1944 is highly ambiguous and greatly lacking in definition. It says the Department of the Interior shall market the surplus power and energy generated at the Army's reservoir projects and that the Federal Power Commission must confirm and approve the rates before they can become effective. It states that "Rate schedules shall be drawn having due regard to the recovery . . . of the cost of producing and transmitting such electric energy, including the amortization of the capital investment allocated to power over a reasonable period of years." It does not define "a reasonable period of years." It does not specify what the rate of interest shall be. It does not prescribe the agency or the method to be used in allocating the power investment.

Section 5 has other weaknesses. Because of its ambiguity it has been made into a vehicle for advancing government ownership and operation in the electric light and power business.

SPA has made 40-year contracts with a group of generating and transmitting super co-operatives. Under these contracts, the G&T co-operatives borrowed money from the Rural Electrification Administration in Washington, D. C., and built steam power plants with a capacity of 85,000 kilowatts. They also borrowed money and built the transmission lines necessary to integrate these steam-generating plants with the transmission system of SPA. The total obligation of the co-operatives for this work was approximately $65 million. SPA made contracts with the co-operatives under which SPA purchased the total output of the steam-generating stations and originally agreed also to operate the transmission system. Subsequently, SPA was required to return operation of the transmission system to the co-operatives. The co-operatives now operate the transmission system and generating plants and SPA pays the cost, buys all the steam power generated and sells back to the co-operatives some of the steam power from their own stations and some SPA hydro power.

By this method SPA was able to obtain 85,000 kilowatts of steam power capacity although the Congress had refused previous requests to authorize direct construction of steam power plants by SPA. Using REA money, the G&T co-operatives and SPA were able to accomplish a result which Congress had previously denied to SPA.

Section 5 states that "Electric power and energy generated at reservoir projects" shall be delivered to the Secretary of the Interior who shall transmit and dispose of such power and energy. Obviously, the only electric power and energy which can be generated at reservoir projects is hydroelectric energy.

IN spite of that, the ambiguity of the language in § 5 is so great that § 5 has been used as authorization for the pur-

chase of steam power. The method is indicated in the following excerpt from the hearing on the Southwestern Power Administration appropriations for 1956, before the Subcommittee on Public Works of the Appropriations Committee, House of Representatives:[18]

MR. PHILLIPS (of California). What I am going back to is the original intent as expressed to the Congress. And in order that Mr. Wright (SPA Administrator) may be thinking of his answer, it was testified last night, I think by Mr. Cannon and confirmed by you, Mr. Wright, that you have to have more power; you have to have supplemental steam power; that you cannot operate dams like this without supplemental steam power.

Will you tell me, without making me read all this fine print, where is the authorization in this Executive Order which authorizes you, in this project, to build steam plants, or to purchase steam power—where the purchase of steam power is authorized to supplement what you were told to market as the surplus electric energy?

MR. WRIGHT. The authority is just in the Flood Control Act of 1944 itself, which says this power must be marketed in accordance with sound business principles to secure the most widespread use thereof, with preference of same given to co-operatives, public bodies, federal agencies, and private companies in the area and to carry out the duties of the Secretary with respect to flood control.

You can only market this peaking power to those people if you integrate it with thermal-produced power. The projects were designed so that you either operate with thermal-produced power, or you do not use one-half of the generators that go in them.

MR. PHILLIPS. I cannot find it in here, but taking your word, you say the Administrator is designated as the marketing agent for the surplus electric energy, and that is interpreted by you to mean, if there is not enough surplus electric energy to sell, you are authorized and obligated, to go out and buy steam power in order to supplement that?

❦

¶ *"SECTION 5 has created a specially privileged class of preferred customers. In order for them to enjoy the special subsidy provided to them by § 5, SPA contends it must arrange to provide full utility service. Therefore SPA construes § 5 to mean that SPA must acquire steam power capacity to make up for the deficiencies of its hydroelectric capacity. This converts SPA from a profitable peaking power sales operation to an unprofitable utility operation. The result is that the government has been losing at the rate of more than $1 million a year from the start of the project, and in fiscal year 1955 lost more than $5 million."*

MR. WRIGHT. That is correct.

MR. PHILLIPS. Now was that the Corps' conception when they built these plants?

COLONEL WHIPPLE (of Corps of Engineers). I do not believe anybody in the Corps, when they planned these plants, contemplated the federal government buying more power in order to sell the power produced from these projects. I do not believe that was thought of, and certainly they did not think in terms of steam power. They did, however, during the planning of the projects, work out the most valuable power which could be produced from the projects, and the majority of those projects are in an area where they can best be used, most economically be used, if they produce the most valuable power from the site, which is peaking power.

COLONEL Whipple stated clearly that the Corps of Engineers had no thought of steam power being purchased to supplement the hydroelectric power. Nevertheless, Mr. Wright states that, in his opinion, "sound business principles" require him to purchase supplementary steam power to reinforce undependable hydroelectric energy.

The total investment of the United States in power facilities in the projects of the Southwestern Power Administration is approximately $205 million. The installed generating capacity at the end of 1956 was more than 500,000 kilowatts. During the year 1956, the electric energy generated at these projects was over 500 million kilowatt-hours. That amount of power and energy is worth approximately $8 million annually.[19]

The electric light and power companies in the territory of the Southwestern Power Administration would take delivery of the power and energy and pay more than $8 million a year for it, at the dam sites.

Instead of receiving $8 million a year for sale of the power without transmission expense, the government lost more than $1.9 million on the operation in 1955, and failed by more than $5 million to meet the amortization requirements.

The only reason for this disastrous showing by the government is the desire of a hard core of people to use the preference clause in § 5 of the Flood Control Act of 1944 to advance the cause of government ownership and socialization of the electric light and power industry.

ON February 12, 1946, before any money was invested in government transmission facilities for SPA, the Department of the Interior received a joint offer by 11 interconnected and integrated private electric utility companies of the SPA area to purchase all power and energy from all federal power projects in the SPA area at rates to be set jointly by FPC and the Corps of Engineers, and to distribute this power in accordance with § 5.

Without expenditure of any federal funds for transmission lines, steam generation, or purchase of steam-generated power, the government would have received the full value of all the power and energy from all of the hydroelectric projects in the SPA area. All of the REA co-

Squaring a Contract

"It is difficult to see how Arkansas Power & Light Company and Reynolds Metals Company could have done anything more than they did do to attempt to make certain their actions were legal. First, they were urged on by their own government. Second, they dealt with a legally constituted authority, the duly appointed Secretary of the Interior who is authorized under § 5 of the Flood Control Act to be the marketing agent for hydroelectric energy from reservoir projects. Third, they successfully obtained the approval of the Federal Power Commission which is specified as the agency which must give approval and confirmation to the rates in power contracts of the kind they were making."

operatives would have received 24-hour electric service from a large number of points of connection. The G&T co-operatives would never have had to burden themselves with $65 million of indebtedness primarily to help Southwestern Power Administration in its effort to build a large governmentally managed power system in the Southwest.[20]

In an effort to build an enormous government-owned power system the Southwestern Power Administration has burdened itself with unnecessary investments and expenses for transmission. It has burdened itself with the purchase of steam power. All of this has been done in order to permit SPA to assume a utility function for which it was not designed.

Section 5 has created a specially privileged class of preferred customers. In order for them to enjoy the special subsidy provided to them by § 5, SPA contends it must arrange to provide full utility service. Therefore SPA construes § 5 to mean that SPA must acquire steam power capacity to make up for the deficiencies of its hydroelectric capacity. This converts SPA from a profitable peaking power sales operation to an unprofitable utility operation. The result is that the government has been losing at the rate of more than $1 million a year from the start of the project, and in fiscal year 1955 lost more than $5 million.

The basic reason why SPA is in financial trouble is that SPA has been trying to sell something it does not have. It has been selling electric service on the

basis of 4,000 to 5,000 hours' use of generating capacity when its available water will only provide about 2,000 hours' use. SPA has been doing this because it is trying to fulfill a utility responsibility instead of marketing surplus hydroelectric power, as § 5 provides.

The Comptroller General has suggested the only available cure for this difficulty. It is a legislative remedy by the Congress specifying sound fiscal and accounting practices for multipurpose projects in place of the ambiguities and the discrimination now embodied in § 5.

Footnotes

[16] Public Works Appropriations for 1956. Hearings before the Subcommittee of the Committee on Appropriations. House of Representatives, 84th Congress, 1st Session, Central Section, Part 2, p. 3.

[17] Controller General's audit report, SPA, fiscal year 1955, p. 2.

[18] Public Works Appropriations for 1956, Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives, 84th Congress, 1st Session, Central Section, Part 2, Southwestern Power Administration, p. 95.

[19] At $15 per kilowatt year for demand charge and 1½ mills per kilowatt-hour, the power and energy would be worth $8,250,000. The actual value is greater.

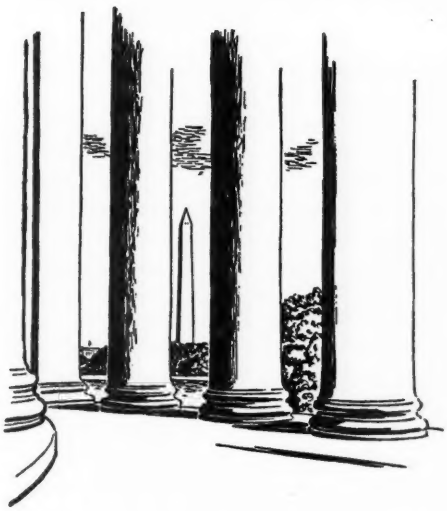
[20] The 11 companies which signed the joint offer of February 12, 1946, agreed to this proposal: "The undersigned co-operating, interconnecting companies hereby offer to purchase the complete hydroelectric output of Denison dam, Norfolk dam, and Pensacola dam, and will further agree to purchase the entire hydroelectric output of all dams as completed under the Flood Control Act of 1944, the power from which, under the terms of that act, is to be turned over to the Southwestern Power Administration for sale in the area served by these companies. We will pay therefor a sum equal to the power benefits, based on the total kilowatt-hour output of said dams as set forth in the reports of the Army Engineers, on which the construction of all such dams was authorized by Congress. . . . Delivery from each new dam as it is completed and service is made available therefrom, shall be at the high tension terminals of the step-up transformers at the dam site." The companies agreed to build at their own expense any necessary lines to accomplish this purpose. The co-operating companies agreed to give such preference to public bodies for governmental uses and to rural electric co-operatives, as the Congress prescribes. Co-operating companies further agreed that they would pass on to all other customers any saving which accrued to the companies through the purchase of power and energy from existing and future dams, as they may come into service, on a basis and in a manner to be directed and prescribed by the proper regulatory bodies having jurisdiction. The companies signing this offer were: Arkansas Power & Light Company, Southwestern Gas & Electric Company, Public Service Company of Oklahoma, Arkansas-Missouri Power Company, Louisiana Power & Light Company, Mississippi Power & Light Company, Oklahoma Gas & Electric Company, The Empire District Electric Company, Oklahoma Power & Water Company, Gulf States Utility Company, Kansas Gas & Electric Company.

Freedom from Government

"THE recurring interest in states' rights in this country is but a version of the recurring struggle of the individual throughout history to attain a measure of freedom. There is only one kind of freedom—freedom from government. Every acquisition of power by government, under any pretext, is at the expense of individual freedom. As in the balance scale of the figure of Justice, when the power of government goes up the power of the people goes down."

—FRANK CHODOROV,
Contributing Editor, Human Events.

Washington and the Utilities



Hell's Canyon Taxes

IDAHO POWER COMPANY has accused its congressional critics of "distortion of fact" in their recent attacks on the grant of federal tax benefits to the company. T. E. Roach, president of the company, which plans three private power dams in Hell's Canyon, telegraphed a statement from Boise, Idaho. He denied that the government had "forgiven" his company any tax payments.

Criticism blew up in Congress soon after the Office of Defense Mobilization ruled the company could write off in five years, in depreciation for federal tax purposes, much of the cost of the Oxbow and Brownlee dams. These two dams on the Snake river, together with a third planned by Idaho Power, would flood the site of a proposed federal dam favored by public power groups.

In his reply Mr. Roach noted that the "rapid write-offs" provision of the 1951 tax law, designed to encourage private construction of defense-essential plants during and since the Korean War, had been applied to thousands of projects. It is a partial tax postponement, not a forgiveness, he said. "This attack [on the ODM action] follows a pattern long established by these same people whose charges, claims, and insinuations failed to stand up before impartial commissions and courts in their considerations of the Idaho Power projects," Mr. Roach said.

The intensity of criticism was obvious even from sources such as Senator Morse (Democrat, Oregon), who has never been particularly reticent or sparing in caustic comment about electric utility companies. He called the ODM action "another shocking betrayal of the public interest" and a "political theft of the people's substance." Morse also said he "was not surprised by this additional act of favoritism by the administration." He called it "a tremendous handout for underdeveloping the people's resources." Representative Al Ullman (Democrat, Oregon) said the ODM decision was a "flagrant violation of public interest." He said it means "that the taxpayers of the nation are subsidizing the Idaho Power Company in its desecration of the Snake river."

DESPITE such emotional language which might turn out to be self-defeating, the administration showed no

signs of backing down on the granting of the tax amortization certificate.

ODM Director Gordon Gray said that Idaho Power's application for a rapid tax certificate met all the requirements necessary under the government's power expansion goal. With litigation over the project now out of the way, Gray said he could not see how in fairness and equity the application could be denied. Noting the criticism of Senator Byrd (Democrat, Virginia), whose opposition to the tax benefit award is based on his disapproval of the entire rapid tax amortization plan, Gray said the last previous certificate issued was for a $21.5 million project of the Virginia Electric & Power Company, to which Senator Byrd had raised no objection.

The Hell's Canyon bloc is probably making some propaganda progress out of the tax amortization development. This seems to be due principally to an absence of any well-publicized explanation of what the granting of a tax amortization certificate means. The smear word "giveaway" has been used very adroitly to suggest that somehow the federal government is actually turning over cash money to public utility companies, or, at least, forgiving them for taxes which others have to pay. Because of the complicated nature of the rapid amortization policy it is difficult to get across to the public at large, just what is involved.

It is not generally realized, for example, that the tax amortization was enacted during the Truman administration. (Truman called the Idaho tax decision "outrageous.") The purpose of the law was to promote defense plant expansion and speed up the national economy by a temporary diversion of tax funds to build more plants, make more jobs, create more business volume, and eventually even create higher tax collections. Many such tax certificates were granted to utilities prior to the present administration and the program is now just about closed down. The certificates are awarded, under the law, upon an application to, and a determination by, the ODM that a proposed plant or part of it is essential to the national defense or supports the same.

The application as approved by ODM would permit the utility to write off 65 per cent of the cost of the Brownlee dam and 60 per cent of the Oxbow cost in five years in depreciation for federal tax purposes. Gray said the Idaho Power applications were filed while the expansion goal for generating power was still in effect, although they were approved after the close, he added. The director told reporters these 33 applications had been figured in the estimates of how much new generating capacity would be needed to supply present and future defense needs. Gray said it seemed to him that a company that had met all the standards for approval could not, in equity and fairness, be denied its applications. He added that litigation on the case had been completed and that was a factor in his decision.

Gas Bill Prospects

Representative Oren Harris (Democrat, Arkansas) has said that his new natural gas bill has "more than a reasonable chance" of winning House approval this year. But there are skeptics among Washington observers. Harris, chairman of the House Commerce Committee, announced plans to start hearings, and these were started May 7th. He said they should not take too long, in view of extensive hearings on the same subject two years ago. Harris spoke before the Oil Institute of McMurry College.

The chairman of the Texas Railroad

Commission commented that the pending natural gas bill that has been approved by President Eisenhower would still leave Texas producers a lot of problems. The congressional measure, called the O'Hara-Harris Bill, appeared to correct objections he made to the bill that was vetoed. The bill calls for federal price regulation on interstate gas, based on market value rather than the present standards of public utility price regulations.

"I am not happy over its provisions," Commission Chairman Olin Culberson said. "It puts in the hands of the Federal Power Commission the power to fix the price of gas at the wellhead which in my judgment will not assure the producer that he will receive a fair price as would be the case in free competition."

The new natural gas legislation pending before Congress was described as containing the essential checks and balances to assure the consumer of a fair price. It was also described as providing necessary incentives to producers to continue exploration and development of adequate supplies of natural gas. This position was expressed by William A. Dougherty, chairman of Consolidated Natural Gas Company.

This large gas distribution company, which serves sections of New York, Ohio, Pennsylvania, and West Virginia, had opposed the vetoed Harris-Fulbright Bill because it did not correct abuses arising out of the so-called favored nation, spiral escalation, and other price increase clauses.

Speaking before the New York Society of Security Analysts, Mr. Dougherty said the new legislation, proposed by Congressmen Oren Harris and Joseph P. O'Hara, conforms to the principles essential in any change in the present law.

On the Senate side, no sponsor could be found immediately for a bill similar to that introduced by Harris. Senator Fulbright, cosponsor of last year's vetoed Harris-Fulbright Bill, has said definitely that he will not lead the fight for a gas bill this year, although he will vote for one if it comes up for consideration. Lack of a sponsor in the Senate also slows progress.

Cooper Plan to Settle TVA Dispute

A PLAN which would end the stalemate in TVA self-financing programs was presented recently to the Senate Public Works Subcommittee by one of the nation's top diplomats, Senator John Sherman Cooper (Republican, Kentucky). Proposals offered by Senator Cooper answer almost all the objections to TVA self-financing raised by members of the subcommittee, as well as those given the House committee a short time ago.

Senator Cooper said an emergency exists with TVA at this time, and lack of action would seriously impair TVA's ability to meet the needs for electric power of the area.

"I want to see TVA live and perform the functions it was created to perform—providing the people of the area with electric power," he said.

Cooper spelled out his plan to those who do not want to give the board "open-end authority to run TVA as they see fit." He proposed that the board be permitted to issue $750 million in bonds, during the next five years. This, he noted, is what the TVA board claims is needed. After five years the board could come back to Congress with a new proposal for expanding.

Funds for the sale of bonds could be spent only in the TVA area of the past February, Cooper's bill provides. But, if any city, county, or region wishes to get into the TVA power area it could do so by getting the consent of Congress.

Telephone and Telegraph

Independent Birthday

THE independent telephone industry will observe the week beginning Sunday, September 8, 1957, as Independent Telephone Week. By proclamation of President Donald C. Power of the United States Independent Telephone Association, during that week some 4,400 independent telephone operating companies, serving 9 million telephones in 11,000 communities in the United States and its territories, will join in celebrating the sixtieth anniversary of organized telephony and the birthday of the national association.

The observance will be marked by such activities as open houses, appropriate publicity and advertising in local newspapers and company publications, addresses by company personnel before service clubs in independent territory. Manufacturers of telephone equipment will participate, and a committee is preparing a special exhibit for the association's national convention at Chicago next October when a series of special events will highlight the celebration.

Today independent telephone companies have an aggregate plant investment of $2,325,000,000, more than 100,000 employees, 200,000 stockholders, and provide telephone service in 11,000 communities to people living in two-thirds of the geographical area of the United States. In his proclamation, President Power requested all independent companies, related organizations, and the public generally "to pause in their appointed rounds in order to recognize and pay tribute to the loyal men and women who have made our industry great, to contemplate their achievements extending over sixty years of the country's history, to give thanks that a calling so essential to the public welfare is permitted to flourish in an atmosphere of freedom in a free nation, and to take such further action to commemorate our sixtieth anniversary as may seem fitting and proper."

Highway Relocations

A MOVE has been launched in Congress to block reimbursement to the states for the cost of relocation of utility facilities necessitated by the federal-aid highway program. Representative Jones (Democrat, Alabama) has introduced two bills in the House to accomplish this purpose. Jones headed a move last year to prevent any reimbursement for relocation expense. Although it seems unlikely that he will be successful this year in repealing the provision of the Federal Aid Highway

Act providing for such reimbursement, the measures he has introduced are some indication of the continuing pressure of the "highway bloc" in Congress to prevent relocation benefits in any way possible.

Introduction of these bills at the present time was probably motivated by the substantial success to date of bills in various state legislatures to change state laws to allow reimbursement to be passed on to the utilities. The box score so far on successful bills now totals eight. Four bills approved by state legislatures have been vetoed by their governors. The eight new laws so far approved by the governors were passed in Georgia (government-owned utilities only), Idaho, Montana, New Mexico, North Dakota, Oklahoma, Tennessee, and Utah. Bills were vetoed by the governors of Colorado, Kansas, New York, and Wyoming. Fourteen bills have been defeated.

Governor Harriman of New York, whose attitude towards utilities is thought to have been stiffened as the result of the failure of a bill he recommended restricting the state public utilities commission to an original cost formula in rate regulation, said in his veto message:

> When a utility corporation is permitted to install its lines on, over, or under a public highway, it does so by grace of the state, and its occupancy is subject to the paramount right of the public in the use of the highway. It acquires no vested interest superior to that of the public, or in the maintenance of the highway in its present condition . . .

The New York and Colorado bills would have had the state pay for utility relocations on all federal-aid systems; the Kansas measure for relocations on the interstate system alone.

Franchise Tax Issue Raised

THE Arkansas Public Service Commission has been asked to decide whether municipal utility franchise tax increases should be passed on to all of a utility's customers or only to the customers in the city imposing the tax. The question was raised in a complaint filed with the commission by Southwestern Bell Telephone Company. MidSouth Gas Company has also requested a ruling on the same point.

The issue was presented when the city of Pine Bluff recently increased Southwestern Bell's franchise tax from $12,000 to $25,000 a year. The company contends its Pine Bluff customers should have to pay the extra cost. Otherwise, the company argues, all its other customers would have to help make this additional contribution to the operation of the Pine Bluff city government.

Southwestern Bell's complaint said that when the commission fixed the company's rates in 1953, it allowed the company $182,000 as an operating expense for franchise taxes in all Arkansas cities it serves. The commission made no allowance for increases in such taxes. As a result, the company said, permitting this extra charge as an operating expense would mean forcing all its customers to share in the tax levied for Pine Bluff alone. Arguing that this would discriminate against ratepayers in other cities, the company contends that if Pine Bluff residents are going to get the benefit of city services financed by the higher tax, then they should pay for it.

The company wants the commission to allow it to add the cost of the higher franchise tax directly to the bills of Pine Bluff customers. It would amount to five or ten cents on each residential telephone bill and 15 to 20 cents on a business telephone.

Financial News and Comment

By OWEN ELY

U. S. Steel Warns of Inflation Menace

U. S. STEEL's report to stockholders for 1956 contains an interesting 6-page discussion of the long-term effects of inflation on plant reproduction costs, and the resulting deficiency in reserves for depreciation. The chart reproduced herewith ("Inflation in Cost of Facilities," page 766) indicates that the index of cost of construction is now more than seven times as high as during the period 1903-15. The effects of World War I about doubled the cost index (from 90 to 200). The change to a 59-cent dollar in the 1930's raised the ante a little; and World War II pushed the index to 300. But the big inflation came in the postwar period, boosting the index to about 700, due presumably to (1) the Korean War, (2) the armament program, and (3) the policy of regular annual increases in wage rates.

The cost trends of electric light and power construction have been compiled in the Handy-Whitman Index of Public Utility Construction Costs, reprinted in the annual statistical bulletins of the Edison Electric Institute. Based on 1911 as 100 per cent the indexes for six U. S. areas as of January 1, 1957, were in a range of 575-641. There has been a steady rise in each quarter since January 1, 1950 (taking the North and South Atlantic indexes as typical). In the year ending January 1, 1957, the indexes showed an average gain of about 9 per cent compared with 7 per cent in the previous year, 2 per cent during 1954, 6 per cent in 1953, and 2 per cent in the two previous years. It seems obvious that the inflationary spiral has been gaining momentum.

U. S. STEEL estimates that its postwar capital expenditures of $3 billion included $1.7 billion at 1945 postwar prices and $1.3 billion representing the effects of inflationary forces. Since 1940 employment cost per employee hour has advanced at a rate of over 8 per cent per annum (compounded) while total costs have gained even more rapidly. The report points out:

> The vast power of industry-wide

DEPARTMENT INDEX

labor unions in compelling annual increases in employment costs far beyond increases in productivity is automatically compelling inflation. To the extent that product price increases are eventually reflected in cost-of-living indexes, further employment cost increases are automatically generated by reason of so-called cost-of-living clauses in wage contracts. This starts the process all over again. Inflation is rapidly becoming automatic in America. Such inflation creates serious problems for business managements. These problems center around the finding of the additional dollars that are needed to finance the ever-increasing costs of doing business.

THE report points out that depreciation reserves are inadequate under inflationary conditions because they are based on original dollar costs unadjusted for subsequent inflation in the cost of replacements. Thus U. S. Steel reports its 1940-56 depreciation accruals as follows in millions of dollars:

Regular Depreciation	$1,706
Amortization	895
Accelerated Depreciation	201
Total	$2,802
Amount Required to Balance Inflation	3,706
Deficiency	$ 904

The $904 million aggregate deficiency for the 17-year period would be considerably greater if the deficiencies were converted into today's dollars.

While the use of accelerated amoritization and accelerated depreciation in recent years has helped to reduce the inadequacy, U. S. Steel points out that "the only real basis of recovering purchasing power would be to adjust for the change in the dollar intervening between the year of capital expenditure and the year in which depreciation is taken."

During the seventeen years U. S. Steel estimates that it paid $608 million in federal income taxes as the result of treating this deficiency as income for tax purposes. The amounts paid by it and all other companies "may be regarded as the hidden taxation of capital as it turns over through depreciation or, alternatively, as a hidden increase in the tax rate on true income. . . . It results in a higher rate for those industries or companies which require relatively heavier investment in longer-term facilities than the average for all industry."

WITH the ending of the granting of certificates of necessity to steel companies for accelerated amortization, the company pointed out, the deficiency in depreciation will become more serious, especially as existing amortization is completed. Since taxes will increase by over half the decline in amortization, the company will be faced with a shortage of cash to meet the cost of new facilities. For all U. S. industry the estimated tax-deductible amortization approximated $3.4 billion in 1956. If no more certificates of necessity are issued, it is estimated that this amortization will decline to about $.5 billion by 1961. Presumably this will mean that either construction programs must be curtailed (with resulting effects on national income and prosperity) or prices of products must be raised, thus aggravating the inflationary process.

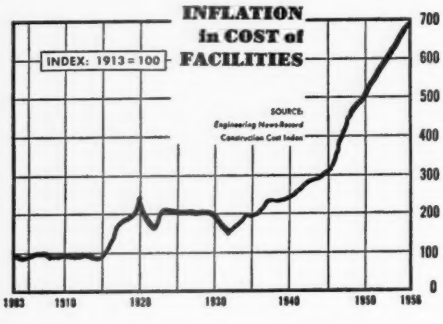
The electric utility companies have been one of the principal beneficiaries of the accelerated amortization program. In 1956 tax deferrals resulting from accelerated amortization amounted to $139 million for all class A and B privately owned utilities, and in 1955 $116 million; and to these figures could be added the smaller but growing amounts for accelerated depreciation, for which data are not yet available. The utilities have been enabled,

by using the cash thus released, to expand their construction programs considerably without selling a corresponding amount of new securities.

Until recently this policy had aroused only slight adverse comment, but the granting of certificates for accelerated amortization on the big new hydro projects being built by Idaho Power Company came to the attention of the public power bloc in Congress, with a resulting outcry. After getting their way in the Dixon-Yates controversy, this group has concentrated on the Hell's Canyon issue. Thwarted thus far by decisions of the FPC and the U. S. Supreme Court, this seems the last chance of the company's opponents to make any progress.

WHILE utilities have obtained aid from Congress and the Treasury Department in fighting inflation, they have received little extra help from state regulatory agencies. Only a few commissions have allowed for inflation by granting more than a 6 per cent return. The utilities could spot light the issue by charging higher depreciation and writing down their plant faster on the stockholders' books, but this is impracticable at present unless they could be assured that their state commissions will allow a higher rate of return on the lower rate base, and grant immediate rate increases so as to maintain net earnings at present levels.

The best method might be to use cost of reproduction as the rate base, but this is permitted by law in only one state (Ohio), though other "fair value" is given consideration in about one-third of the others. Better treatment in this respect seems an urgent need because, if inflation accelerates, utilities may have to curtail new construction and avoid equity financing, as most of them did in the 1930's and early 1940's.



1956 Electric Utility Data

FOLLOWING are selected data from the advance release of the EEI Statistical Bulletin No. 24, for the year 1956: The entire industry increased generating capacity about 5.2 per cent—public power gaining at the rate of 6.8 per cent, while investor-owned utilities increased only 4.8 per cent. The gain in hydro capacity was 2.4 per cent—practically all accounted for by federal projects. Steam capacity gained 6.2 per cent—private utilities gaining 6 per cent while federal and municipal plants increased 7.4.

The 10 per cent over-all gain in kilowatt-hour sales of electricity was well distributed, with increases of 11 per cent for residential customers and for large light and power sales and 9 per cent for small light and power. (Rural use gained only 3 per cent.) Distribution of sales was—large light and power 52 per cent, small 17 per cent, residential 25 per cent, and miscellaneous 6 per cent. The number of residential customers increased nearly 3 per cent and residential usage gained 8 per cent. In terms of revenues the gain in total sales exceeded 8 per cent, with distribution of revenues as follows—large light and power 28 per cent, small 25 per cent, residential 40 per cent, and miscellaneous

7 per cent. (For privately owned utilities residential was only 34 per cent.)

THE use of coal for generation increased 10 per cent and gas 7 per cent, while fuel oil declined 3 per cent, presumably due to price increases. The heat rate (Btu's per kilowatt-hour) dropped nearly 3 per cent and the amount of coal consumed per kilowatt-hour was down 2 per cent.

Average residential kilowatt-hour revenues for the entire industry declined to 2.60 cents from 2.64 cents, and for all customers the rate dropped from 1.67 cents to 1.64 cents. For investor-owned utilities, revenues gained 8 per cent, gross income 8 per cent, fixed charges 10 per cent, and net income 7 per cent. Preferred dividends were up 7 per cent and common dividends 8 per cent, while retained earnings gained only 5 per cent. The cost of fuel increased 12 per cent, taxes were up 7 per cent, and total expenses 9 per cent.

Later Fulbright Findings on Utility Stocks

THE staff of the Fulbright Committee on Banking and Currency at the 1956

APRIL UTILITY FINANCING

PRINCIPAL PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

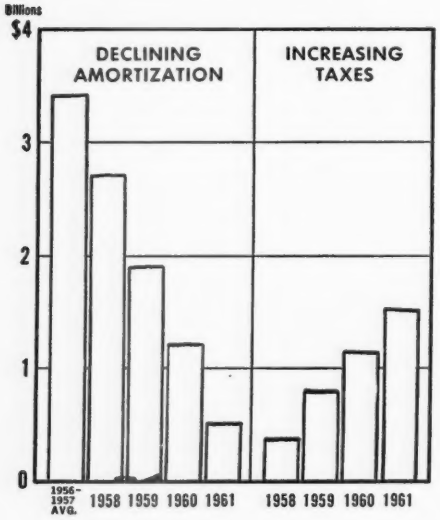
Date	*Amount*	*Description*	*Price To Public*	*Underwriting Spread*	*Offering Yield*	*Aver. Yield For Securities of Similar Quality*	*Moody Rating*	*Success Of Offering*
		Bonds and Debentures						
4/3	$12.0	Western Mass. Elec. 1st 4⅜s 1987	101.43	.81C	4.29%	3.78%	Aa	d
4/10	6.0	Calif. Elec. Power 1st 4⅜s 1987*	100.40	.74C	4.60	4.01	A	d
4/12	6.0	Miss. Power 1st 4⅝s 1987	102.05	.90C	4.50	4.01	A	d
4/17	50.0	Transcontinental Gas Pipe Line 1st (s.f.) 5s 1977	100.63	1.15N	4.95	4.25	Baa	b
4/24	30.0	Lone Star Gas s.f. Deb. 4⅜s 1982	101.00	.92N	4.55	4.01	A	a
4/25	30.0	No. Natural Gas s.f. Deb. 4½s 1976 ..	99.50	.90N	4.54	4.01	A	a
		Preferred Stock						
4/17	10.0	Transcontinental Pipe Line $5.96 Pfd.**	100.00	3.00N	5.96	—	—	a
		Common Stock—Offered to Stockholders					*Earns.-Price Ratio*	
4/2	.3	Berkshire Gas	14.50	—	6.21		10.52%	—
4/4	26.4	Columbia Gas	15.75	.07C	6.35		9.17	g
4/5	1.0	Southeastern Pub. Service	11.25	N	7.11		11.49	h
4/10	6.9	United Illuminating	22.00	#	5.91		7.30	i
4/30	2.0	Cascade Nat. Gas	9.00	N	—		—	l
		Common Stock—Offered to Public						
4/3	4.2	Calif. Electric Power	13.88	.44C	5.47		6.99	a
4/11	6.4	Iowa Electric Light & Power	29.00	1.00N	5.16		7.75	b
4/17	1.6	Iowa Southern Utilities	21.50	.91N	5.95		8.55	b
4/30	7.5	Portland General Electric	25.00	.95	4.80		7.19	a

#—Not underwritten. *One per cent improvement fund annually. **Two and a half per cent annual sinking fund starting 1963. C—Competitive. N—Negotiated. a—Reported that the issue was well received. b—Reported that the issue was fairly well received. d—Reported that the issue sold slowly. g—Offered on a 1-for-13 basis; 93 per cent subscribed, plus 59 per cent oversubscription. h—Offered to stockholders on a 1-for-10 basis, with oversubscriptions. i—Offered to stockholders on a 1-for-8 basis, with no underwriting. l—Offered to stockholders on a 1-for-2½ basis. (Underwritten.)

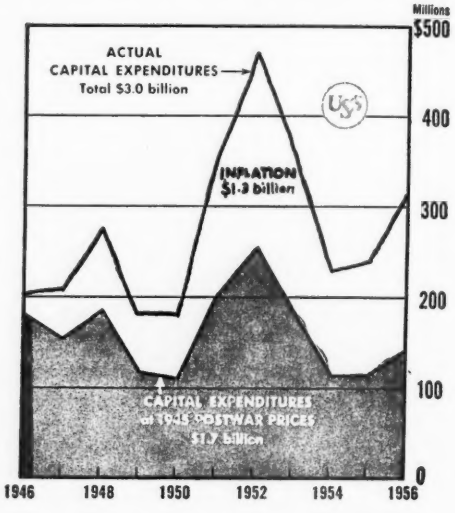
Source, Irving Trust Company.

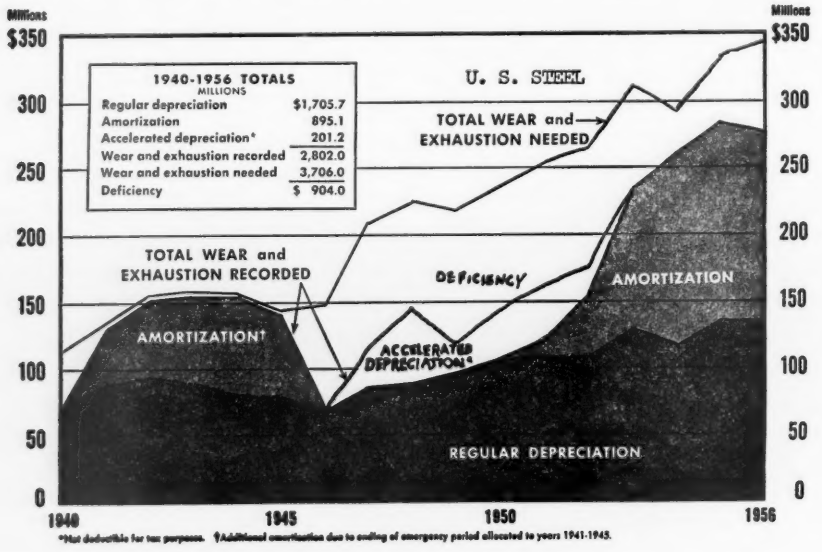
AMORTIZATION and TAXES

ALL BUSINESS



CAPITAL EXPENDITURES and INFLATION





*Not deductible for tax purposes. †Additional amortization due to ending of emergency period allocated to years 1941-1945.

Source, U. S. Steel Corporation

year end issued a 291-page report on "Institutional Investors and the Stock Market 1953-55." The study included an analysis of the portfolios of 20 open-end and 5 closed-end investment companies, 30 pension funds, 125 life, casualty, and fire insurance companies, and 30 bank-administered common trust funds. The purchases and sales of 25 important common stocks by these institutions over the 34-month period ending in October, 1956, were analyzed. The list of stocks included five utilities—American Telephone and Telegraph, General Public Utilities, Pacific Gas and Electric, Southern California Edison, and United Gas Corporation. A brief summary of the findings may be of interest.

In the analysis of the "Highest Ranking Stocks in Net Acquisitions" only one utility stock—American Telephone and Telegraph—qualified, net institutional acquisitions amounting to about $31 million comparing with $51 million of Sears, Roebuck and $44 million of General Motors. During the 34-month period net purchases of the five utility stocks (in thousands of shares) totaled as shown in table below. (To show the relative importance of the purchases, we have added the number of shares now outstanding.)

In recent years institutions have done an increasing amount of their trading in utility stocks on an over-counter basis, and Table 6 of the report throws some light on this tendency. Of the total acquisitions of utility stocks (other than through subscriptions and conversions) by 25 life insurance companies the ratios of over-counter purchases to total purchases were about as follows, during the 34-month period, for the securities listed:

	No. of Shares
American Tel. & Tel.	0
General Public Utilities	31%
Pacific G. & E.	81
Southern Calif. Edison	48
United Gas Corp.	0
Baltimore G. & E.	64
Commonwealth Edison	30
Consumers Power	29
Duquesne Light	56
New York State E. & G.	57
Northern States Power	68
Ohio Edison	9
Southern Co.	38
Virginia Electric & Power	65
Wisconsin Electric Power	15

EEI Forecasts of Capability And Peak Loads through 1960

IN connection with the Edison Electric Institute's twenty-first semiannual electric power survey, some preliminary statistics have been released which may be modified slightly in the final bulletin. A summary may be of interest, since the forecast now includes the year 1960, which was not covered in the survey of

	Amer. Tel. & Tel.	*Gen. Pub. Utils.*	*Pac. Gas & Elec.*	*South. Cal. Ed.*	*United Gas Corp.*
Open-end Invest. Cos.	75	192	35	140	179
Closed-end Invest. Cos.	—	D 9	13	—	D 94
Pension Funds	38	53	46	84	174
Life Insurance Cos.	38	D 3	62	78	11
Casualty & Surety Ins. Cos.	10	15	19	5	64
Fire Insurance Cos.	3	6	10	19	6
Common Trust Funds	19	19	13	8	30
Total	183	273	198	334	370
No. of Shs. Outstanding (000)	63,042	10,449	17,069	8,351	12,885
Ratio	3%	3%	1%	4%	3%

D—Decrease.

Year	Millions KW Capability	Peak Load	% Gross Margin	Annual Increases % Capability	Peak Load
1955	116	98	19%		
1956	121	102	20	4%	5%
1957	131	113	16	9	11
1958	148	123	20	13	8
1959	160	132	21	8	7
1960	169	141	20	6	7

last October. For the U. S. as a whole, using December peak capabilities and loads and median hydro conditions, the projections are approximately as shown above.

In the new study, the year-end 1956 figures are lower than the estimates published last September—peak load being only 102.5 million kilowatts compared with the earlier estimate of 106.2, while capability was 120.6 million kilowatts compared with the estimate of 122.7. As a result the gross margin of reserve rose from 15.5 per cent to 19.7 per cent. Future projections of peak loads have been reduced somewhat, but the 1959 figure is only lower by .8 million; capability works out about the same for 1959 as in the earlier estimate, so that the reserve margin is slightly higher. On the comparison of summer peaks and capabilities there is less difference between the old and new forecasts for 1957.

In the table showing gains in monthly peak demands for 1956 over 1955, the first half made a better showing. January started off with a gain of 13.9 per cent and the smallest gain in the first half was in May with 10.5 per cent; however in the second half the gains ranged between 7.1 and the December figure of 4.6 per cent.

DATA ON ELECTRIC UTILITY STOCKS

Annual Rev. (Mill.)			5/1/57 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-56	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
$268	S	American G. & E.	39	$1.44m	4.8%	$2.03De	5%	9%	19.2%	71%	34%
46	O	Arizona Pub. Serv.	27	1.12	4.1	1.68De	23	13	16.1	67	31
11	O	Arkansas Mo. Power	26	1.24c	4.8	2.00De	11	10	13.0	62	31
32	S	Atlantic City Elec.	30	1.30	4.3	1.66F	10	10	18.1	78	33
132	S	Baltimore G. & E.	35	1.80	5.1	2.32De	13	8	15.1	78	45
7	O	Bangor Hydro-Elec.	33	1.90	5.8	2.69De	22	8	14.7	71	35
5	O	Black Hills P. & L.	24	1.40	5.8	2.40Ja	10	1	10.0	58	27
99	S	Boston Edison	50	2.80	5.6	3.45De	1	2	14.5	81	50
21	A	Calif. Elec. Power	15	.76	5.1	.97De	7	16	15.5	78	36
21	O	Calif. Oreg. Power	33	1.60	4.8	2.30De	9	5	14.3	70	33
8	O	Calif. Pac. Util.	29	1.50	5.2	2.30De	6	6	12.6	65	25
63	S	Carolina P. & L.	25	1.20	4.8	1.67Ma	—	2	15.0	72	42
28	S	Cent. Hudson G. & E.	16	.80	5.0	1.10De	10	10	14.4	73	34
21	O	Cent. Ill. E. & G.	31	1.60	5.2	2.35De	14	11	13.2	68	33
35	S	Cent. Ill. Light	55	2.60	4.7	3.86Ma	D4	8	14.2	67	42
51	S	Cent. Ill. P. S.	30	1.60	5.3	2.31Ma	D5	12	13.0	69	38
13	O	Cent. Louisiana Elec.	35	1.60	4.6	2.06De	13	8	17.0	78	32
35	O	Cent. Maine Power	22	1.40	6.4	1.77Ma	4	4	12.4	79	34
128	S	Cent. & South West	39	1.60	4.1	2.32De	14	15	16.8	70	35
12	O	Cent. Vermont P. S.	17	1.00	5.9	1.20Ma	—	1	14.2	83	31
114	S	Cincinnati G. & E.	29	1.20f	4.1	1.99De	5	7	14.6	60	43
7	O	Citizens Util. "B"	16	.90a	5.6a	1.12De	4	10	14.3	80	42
111	S	Cleve. Elec. Illum.	42	1.60	3.8	2.60De	4	8	16.2	62	49
4	O	Colo. Cent. Power	26	1.20	4.6	1.84De	14	8	14.1	65	33
48	S	Columbus & S. O. E.	30	1.60	5.3	2.25De	3	5	13.3	71	36
360	S	Commonwealth Edison	40	2.00	5.0	2.72De	4	8	14.7	74	47
11	A	Community Pub. Serv.	26	1.20	4.6	1.82De	5	15	14.3	66	52
2	O	Concord Elec.	44	2.40	5.5	2.71**	3	2	16.2	89	61

Annual Rev. (Mill.)		(Continued)	5/1/57 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-56	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
71	O	Connecticut Lt. & Pr.	18	1.00	5.6	1.13Ma	D3	7	15.9	88	39
23	O	Connecticut Power	40	2.25	5.6	2.75De	D2	4	14.5	82	41
522	S	Consol. Edison	45	2.40	5.3	3.15Ma	D2	8	14.3	76	39
208	S	Consumers Power	47	2.40	5.1	3.33F	5	6	14.1	72	43
74	S	Dayton P. & L.	48	2.40	5.0	3.81De	13	8	12.8	63	38
39	S	Delaware P. & L.	48	1.80	3.8	2.64Ma	9	10	18.2	68	35
237	S	Detroit Edison	40	2.00	5.0	2.48Ma	10	8	16.1	81	46
130	A	Duke Power	28	1.20	4.3	1.90De	5	20	14.7	63	52
95	S	Duquesne Light	36	2.00	5.6	2.44De	4	4	14.8	82	34
31	O	Eastern Util. Assoc.	33	2.20	6.7	2.55F	D3	0	12.9	78	34
2	O	Edison Sault Elec.	16	.80	5.0	1.08De	D9	13	14.8	74	42
12	O	El Paso Elec.	25	1.00	4.0	1.40F	14	8	17.9	71	41
12	S	Empire Dist. Elec.	21	1.20	5.7	1.63Ma	10	3	12.9	74	31
5	O	Fitchburg G. & E.	49	3.00	6.1	3.65De	4	3	13.4	82	45
49	S	Florida Power Corp.	57	1.80	3.2	2.86De	24	19	20.0	63	32
110	S	Florida P. & L.	54	1.28	2.4	2.70Ma	24	25	20.0	47	38
189	S	General Pub. Util.	36	2.00	5.6	3.05De	9	12	11.8	66	40
6	O	Green Mt. Power	16	1.00	6.3	1.23De	—	7	13.0	81	36
56	S	Gulf States Util.	40	1.60	4.0	2.24F	3	14	17.9	71	32
22	A	Hartford E. L.	57	2.88	5.1	4.12De	D1	12	13.8	70	49
5	O	Haverhill Elec.	40	2.35	5.9	2.67De	2	—	15.0	88	100
21	O	Hawaiian Elec.	45	2.50g	5.4	3.32Ma	6	—	13.5	77	36
78	S	Houston L. & P.	56	1.60k	2.9	2.83Ma	8	20	19.8	57	46
8	O	Housatonic P. S.	22	1.50	6.8	1.43De	1	0	15.4	105	53
27	S	Idaho Power	35	1.40	4.0	2.18De	16	7	16.1	64	36
82	S	Illinois Power	57	3.00	5.3	4.00De	16	6	14.3	75	35
43	S	Indianapolis P. & L.	31	1.50	4.8	2.06De	10	5	15.0	73	39
20	S	Interstate Power	14	.80	5.7	1.03F	NC	3	13.6	78	30
33	O	Iowa Elec. L. & P.	28	1.50	5.4	2.28Ma	5	10	12.3	66	31
39	S	Iowa-Ill. G. & E.	31	1.80	5.5	2.41De	4	3	12.9	75	41
37	S	Iowa Power & Light	28	1.60	5.7	2.03De	—	2	13.8	79	35
32	O	Iowa Pub. Serv.	16	.80	5.0	1.08Ma	D2	5	14.8	74	35
13	O	Iowa Southern Util.	21	1.28	6.1	1.84Ma	8	8	11.4	70	37
56	S	Kansas City P. & L.	39	2.00	5.1	2.78Ma	4	8	14.0	72	35
30	S	Kansas G. & E.	30	1.32	4.4	2.27Ma	24	12	13.2	58	29
45	S	Kansas Pr. & Lt.	25	1.30	5.2	2.03Ma	7	9	12.3	64	31
37	O	Kentucky Util.	24	1.28	5.3	2.13De	4	9	11.3	60	34
7	O	Lake Superior D. P.	24	1.20	5.0	1.71De	12	6	14.0	70	38
6	O	Lawrence Electric	29	1.75	6.0	1.87**	34	D	15.5	94	62
98	S	Long Island Ltg.	23	1.20	5.2	1.45Ma	D5	6	15.9	83	32
52	S	Louisville G. & E.	28	1.10	3.9	1.88De	4	4	14.9	59	40
7	O	Lowell Elec. Lt.	55	3.00	5.5	3.64**	19	D	15.1	82	59
9	O	Lynn G. & E.	33	1.60	4.8	2.10De	3	8	15.7	76	77
9	O	Madison G. & E.	45	1.80	4.0	3.82De	11	11	11.8	47	50
4	A	Maine Pub. Serv.	16	1.08	6.8	1.28F	17	3	12.5	84	33
5	O	Michigan G. & E.	45	1.60b	6.6b	4.02De	10	14	11.2	40	37
159	S	Middle South Util.	34	1.60	4.7	2.25Ma	15	4	15.1	71	34
28	S	Minnesota P. & L.	27	1.40	5.2	2.11Ma	D2	6	12.8	66	36
2	O	Miss. Valley P. S.	30	1.40j	4.7	2.14Ma	D14	3	14.0	65	31
12	A	Missouri Pub. Serv.	13	.72h	5.5	.92Ma	D2	20	14.1	78	33
6	O	Missouri Util.	25	1.36	5.4	1.80Ma	D1	2	13.9	76	32
39	S	Montana Power	46	1.80	3.9	3.23De	7	6	14.2	56	37
142	S	New England Elec.	17	1.00	5.9	1.23De	D1	0	13.8	81	34
44	O	New England G. & E.	17	1.05	6.2	1.44F	—	5	11.8	73	42
45	O	New Orleans P. S.	45	2.25	5.0	2.58F	D1	0	17.4	87	38
2	O	Newport Elec.	18	1.00	5.6	1.40Ja	16	4	12.9	71	30
83	S	N. Y. State E. & G.	38	2.00	5.3	3.05Ma	3	8	12.5	66	39
244	S	Niagara Mohawk Pr.	31	1.80	5.8	2.07Ma	D8	4	15.0	87	33
81	O	Northern Ind. P. S.	40	1.92	4.8	2.92Ma	4	7	13.7	66	35
139	S	Nor. States Power	17	.90	5.3	1.20Ma	3	8	14.2	75	34
9	O	Northwestern P. S.	17	1.00	5.9	1.38De	D2	3	12.3	72	26
129	S	Ohio Edison	52	2.64	5.1	3.51Ma	D4	9	14.9	75	44
48	S	Oklahoma G. & E.	43	1.80	4.2	2.45Ma	11	9	17.6	73	35
15	O	Otter Tail Pr.	28	1.60	5.7	2.21F	1	7	12.7	72	38
471	S	Pacific G. & E.	49	2.40	4.9	3.37De	NC	13	14.5	71	35
48	O	Pacific P. & L.	32	1.60	5.0	2.10De	17	8	15.2	76	29

Annual Rev. (Mill.)		(Continued)	5/1/57 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earns. 1951-56	Price-Earns. Ratio	Div. Payout	Approx. Common Stock Equity
129	S	Penn Power & Lt.	44	2.40	5.5	3.32F	10	11	13.3	72	28
225	S	Phila. Elec.	40	2.00	5.0	2.65Ma	9	6	15.1	75	43
35	O	Portland Gen. Elec.	25	1.20	4.8	1.77F	NC	6	14.1	68	36
64	S	Potomac Elec. Pr.	22	1.10	5.0	1.54De	8	8	14.3	71	39
83	S	Pub. Serv. of Colo.	44	1.80i	4.1	2.63De	7	8	16.7	68	39
300	S	Pub. Serv. E. & G.	32	1.80	5.6	2.15Ma	D11	—	14.9	84	38
75	S	Pub. Serv. of Ind.	39	2.00	5.1	2.60F	11	4	15.0	77	36
29	O	Pub. Serv. of N. H.	17	1.00	5.9	1.41Ma	13	13	12.1	71	32
12	O	Pub. Serv. of N. M.	15	.80	5.3	1.14De	16	7	13.2	70	37
25	S	Puget Sound P. & L.	28	1.36	4.9	1.67De	10	10	16.8	81	61
58	S	Rochester G. & E.	29	1.60	5.5	2.24Ma	5	10	12.9	71	35
19	O	Rockland L. & P.	19	.80	4.2	1.05De	9	11	18.1	76	30
8	S	St. Joseph L. & P.	24	1.40	5.8	1.81De	7	7	13.3	77	40
51	S	San Diego G. & E.	21	.96	4.6	1.51De	23	6	13.9	64	40
8	O	Savannah E. P.	20	1.00	5.0	1.36E	13	4	14.7	74	30
9	O	Sierra Pacific Pr.	21	1.20	5.7	1.98F	30	14	10.6	61	27
195	S	So. Calif. Edison	50	2.40	4.8	3.20Ma	D5	3	15.6	75	37
43	S	So. Carolina E. & G.	23	1.10	4.8	1.50F	10	20	15.3	73	36
7	O	Southern Colo. Pr.	15	.70	4.7	1.29De	3	9	11.6	54	43
228	S	Southern Co.	23	1.10	4.8	1.54Ma	10	10	14.9	71	35
16	S	So. Indiana G. & E.	31	1.60	5.2	2.06Ma	6	5	15.0	78	35
7	O	So. Nevada Power	19	1.00	5.3	1.58Ma	15	15	12.0	63	34
1	O	Southern Utah Power	16	1.00	6.3	1.49De	55	1	10.7	67	39
3	O	Southwestern E. S.	20	1.16	5.8	1.64N	—	4	12.2	71	27
39	S	Southwestern P. S.	31	1.40	4.5	1.71F	13	4	18.1	73	30
26	A	Tampa Elec.	34	1.20	3.5	1.65Ma	16	14	20.6	73	36
146	S	Texas Utilities	49	1.44	2.9	2.40F	19	15	20.4	60	38
40	S	Toledo Edison	13½	.70	5.2	1.01De	D8	5	13.4	69	29
14	O	Tucson G. E. L. & P.	35	1.40	4.0	2.02De	27	14	17.3	69	35
122	S	Union Elec. of Mo.	29	1.52	5.2	1.70De	—	11	17.1	89	36
33	O	United Illuminating	24	1.30	5.4	1.61De	—	7	14.9	81	48
5	O	Upper Peninsula Pr.	28	1.60	5.7	2.10De	D3	10	13.3	76	37
41	S	Utah Power & Lt.	29	1.10	3.8	1.73F	8	9	16.8	64	43
118	S	Virginia E. & P.	50	1.80	3.6	2.78De	10	14	18.0	65	34
26	S	Wash. Water Power	36	1.88	5.2	2.33Ma	8	14	15.5	81	41
132	S	West Penn Elec.	27	1.50	5.6	2.06F	D1	9	13.1	73	33
64	O	West Penn Power	50	2.40	4.8	3.27De	1	13	15.3	73	33
11	O	Western Lt. & Tel.	34	2.00	5.9	3.16De	17	10	10.8	63	33
26	O	Western Mass. Cos.	40	2.20	5.5	3.09De	—	10	12.9	71	56
105	S	Wisc. El. Pr. (Cons.)	32	1.60	5.0	2.44De	3	5	13.1	66	40
40	O	Wisconsin P. & L.	26	1.28	4.9	1.87De	9	4	13.9	68	36
37	S	Wisconsin P. S.	22	1.20	5.5	1.78De	2	6	12.4	67	36
		Averages			5.1%			9%	14.5	72%	
		Foreign Companies									
188	S	Amer. & Foreign Pr.	17	1.00	5.9	2.19Se	27	2	7.8	46	46
139	A	Brazilian Trac.	9	.75n	8.3	1.18**	D7	D	7.6	64	72
68	A	British Columbia Pr.	47	1.20	2.6	2.34De	14	27	20.1	51	27
17	A	Gatineau Power	30	1.40	4.7	2.28De	15	15	13.2	61	31
31	O	Mexican L. & P.	14	—	—	1.80**	27	117	7.8	—	45
13	A	Quebec Power	30	1.20	4.0	1.99De	15	14	15.1	60	52
54	A	Shawinigan Wtr. & Pr.	90	1.80	2.0	4.25De	22	26	21.2	42	40

A—American Stock Exchange. B—Boston Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; D—December. *Based on average number of shares. **Calendar year 1955. a—Estimated annual rate. The "A" stock received stock dividends. b—Also 3 per cent stock dividend December 31, 1956, which is included in the yield. c—Also 2 per cent stock dividend January 10, 1956. f—Also 5 per cent stock dividend August 15, 1956. g—Cash dividends of $2.50 in 1956 included 30 cents extra; 10 per cent stock dividend also paid April 30, 1956. h—Also stock dividend of one share for each 200 shares held September 12, 1956. i—Also 10 per cent stock dividend November 16, 1956. j—Also 10 per cent stock dividend August 31, 1956. k—Also 5 per cent stock dividend December 17, 1956. m—Also 2 per cent stock dividend January 10, 1956; 3-for-2 split June 15, 1956. n—Also 5 per cent stock dividend December 28, 1956.

What Others Think

Trinity "Partnership" Project Stirs Debate

OPPOSING philosophies concerning the development of the nation's water-power resources have clashed once again over the Interior Department's proposal for "partnership" development of the Trinity river project in California. The approaching debate in Congress promises to produce the familiar line-up on both sides: on the one hand, those who favor the administration's view that, wherever possible, private and local interests should be permitted to participate in resource development and bear the costs of such projects in proportion to the benefits received; on the other hand, those who view power developments as the exclusive responsibility of the federal government which can alone achieve the most comprehensive use of limited resources.

Disagreement over construction of the Trinity project, a unit of California's Central Valley project, appeared shortly after Interior Secretary Seaton recommended last February that the Trinity project be developed jointly by the federal government and Pacific Gas and Electric Company. Congress, which has already authorized the project, had asked Seaton to give his opinion on whether the project should be built wholly by the federal government or with private utility help. "In my opinion," Seaton replied, "it appears clear that joint development would provide substantially more funds for irrigation and multipurpose development." Seaton said that PG&E's proposal for installation of power facilities would convert the falling water of the Trinity development into a "substantial" asset that would mean a surplus of $165 million in project revenues in fifty years of operations. To get such a surplus from federal operation, said Seaton, Central Valley power rates would have to be increased 20 per cent.

SEATON'S proposal has now been translated into legislation introduced late last month by Representative Scudder (Republican, California). To reach the House floor at this session of Congress, it must overcome the bitter opposition of Representative Engle (Democrat, California). Engle, chairman of the House Interior Affairs Committee, which must clear the bill for consideration by the House, had promised earlier to give the proposed legislation a "hearing on its merits." Since then, however, Engle's attacks on the proposal raise doubts as to whether the legislation will reach the House for a vote before adjournment.

Engle's opposition to the project was contained in an 11-point indictment inserted in the *Congressional Record* of March 25th. In mid-April, Leigh H. Smith, a division manager of PG&E,

answered the Congressman point by point in an address to the Redding (California) Kiwanis Club. The two statements clearly define the issues involved:

1. ENGLE: "Acceptance of Secretary Seaton's recommendation and approval of the company's proposal would be a reversal of half a century of power policy in the federal government. The policy which has been established by Congress relative to disposal of electric power and energy made available through development of the nation's water resources is set out in numerous acts of Congress . . . This long-established policy provides that such electric power and energy be disposed of in such manner as to encourage the most widespread use thereof at lowest possible rates to consumers consistent with sound business principles, and that preference in such disposition shall be given to public agencies, municipalities, and co-operatives."

SMITH: The partnership proposal conforms to long-established policy of leasing power privileges which Congress has followed since 1908. At least 26 partnerships have been authorized, 12 executed during Republican and 14 during Democratic administrations.

2. ENGLE: ". . . the PG&E proposal would load hidden charges on the power bills of northern California power and energy users. The home owner, farmer, and businessman would find the PG&E highly advertised generous payments to the government on their power bills. Also on their power bills would be the costs to the company for construction and operation of the power plants as well as the federal, state, and local taxes, which the company claims that it would pay if it builds the power facilities. These are all costs to the company which would necessarily have to be passed on to the consumers. . . . The cost of the powerhouses, the money paid the federal government for falling water, as well as the federal, state, and local taxes, would all be charged to the power users, and at a profit. To put it simply, if the PG&E proposal produces $165 million more in surplus revenues over the pay-out period than under federal construction and the PG&E Company pays the $135 million in taxes, then the power consumers pay $300 million more, plus the company's profit."

SMITH: The average $5.35 per acre-foot which PG&E would pay for use of falling water is based on what power would cost from the most efficient alternate source and would place no hidden charges or additional burden on PG&E electric customers. As for PG&E being "merely a tax collector," it performs that function in the same way as any other tax-paying business. The point is that PG&E's plan will create taxes, while Engle's plan will consume taxes.

3. ENGLE: "Under the Secretary's recommendation, and the company's proposal, one segment of the vast integrated reclamation project would be constructed and operated entirely different from the rest of the project. . . . Acceptance of the Secretary's recommendation would irreparably disrupt existing operations of the Central Valley project and threaten future development."

SMITH: Water releases to meet Central Valley project requirements will be the same whether the public utility company or the government operates the power plants.

4. ENGLE: "The real purpose of the company is to stop for all time the expansion of federal power in California

in order that it may monopolize the power market in that area."

SMITH: PG&E's offer to "firm up" 450,000 kilowatts of Central Valley project power to make it dependable will put the CVP in a better position to serve its customers than ever before, instead of harming the project as Engle has charged.

5. ENGLE: "Under the PG&E proposal, the project plan of operation would provide for releases of water to maximize power and energy production. The proposed contract includes a very detailed schedule of releases designed to produce the maximum amount of power and energy for integration into the company's over-all power system. Although, theoretically, the water needs of the project would retain priority, any time the federal government could not meet the schedule of releases for power because of interference with water consumptive use requirements, then the federal government would have to pay the company penalties for such noncompliance with the schedule. . . . The costs to the federal government which would result from penalties have not been considered in the evaluation of the proposal. . . . Even if the priorities are adhered to, I can visualize huge unforeseen payments to the company."

SMITH: Reimbursement to PG&E for the purchase of replacement power, if the government should change its established irrigation water release schedules, would be no greater than the cost for replacement power to the government under the all-federal plan.

6. ENGLE: ". . . financial studies of the Central Valley project, based on federal development, indicate surplus revenues sufficient to expand irrigation as fast as the need develops. The need for additional power revenues to assist irrigation development does not exist."

SMITH: The $165 million net gain from the joint development will provide revenues which can be used to develop more water projects in California.

7. ENGLE: "It appears that the federal government is put in an unfavorable position with respect to take over of the power facilities at the end of the contract period and that the Secretary has overlooked this in setting out the financial advantages of the recommended proposal."

SMITH: The cost to the government for recapture of PG&E's Trinity facilities after the 50-year contract period, should the government wish to exercise that right, will be governed by the provisions and public protection set forth in the contract which conform to the terms of the Federal Power Act. In the Trinity contract, PG&E has waived its right to full, just compensation.

8. ENGLE: ". . . the company, in its offer to purchase falling water, determined the value of the Trinity energy by a comparison with the cost of steam generation. . . . Using the company's argument [before the California Public Utilities Commission] for including an escalator clause in its contracts for disposal of energy, whereby the price is tied to the cost of fuel, why should not a similar clause be included in a contract whereby the company, in a sense, is purchasing energy? In other words, as the value of the Trinity energy to the company increases, why should not the company pay more for it? It is my understanding that, with respect to the company's present offer, the energy was evaluated on the basis of fuel oil at $2 per barrel. The price of fuel oil today is in the neighborhood of $2.75 per barrel. Already, then, the value of the energy to the company is considerably more than the company reported as a basis for its offer."

SMITH: PG&E's proposed payments for falling water represent full market value of the power it will generate, based on the cost of generating equivalent power in modern steam plants. Current costs of fuel oil and lower-cost natural gas, both used in PG&E steam generation, were used to determine the falling water value. In suggesting that the payments be escalated with oil prices, Engle neglects to take into account the use of natural gas and the possible future use of nuclear fuel in power plants.

9. ENGLE: "At the time the Pacific Gas and Electric Company appeared before the congressional committees its proposal called for installation of 130,000 more kilowatts of generating capacity than the Bureau [of Reclamation] proposed at that time to install. This higher capacity, of course, was based on integration of the power facilities into the company's over-all system and the use of the Trinity facilities for peaking purposes. It was a little difficult at that time to understand how the company could claim this advantage in the face of the understanding we have always had that regardless of who constructed the power facilities the energy therefrom, along with the energy from the other CVP power facilities, would be integrated into the over-all system for the benefit of both the company and the federal government. Since that time a firm agreement with respect to integration has been reached between the bureau and the company and the authorized capacity of the Trinity division has been increased to 'not to exceed 400,000 kilowatts.' Therefore, this argument in favor of the company's proposal is no longer valid and the operating plan will be the same regardless of who builds the power plants."

SMITH: PG&E's plan will provide the CVP with important advantages. These include support by the integrated regional PG&E power system, the use of PG&E lines to "wheel" government power, and the delivery of power to the pumps at the proposed San Luis reservoir cheaper than the government could do it for itself.

10. ENGLE: ". . . there is a serious question as to whether the expenditures for the studies [made by the Secretary of the Interior] involved in this proposal have not been made illegally."

SMITH: The House Interior Affairs Committee, of which Engle is chairman, directed the Secretary to make the study which Engle now terms illegal.

11. ENGLE: ". . . if the company's proposal is accepted it would result in federal installations paying about $30 million more for power over the repayment period, and this additional payment by federal installations would be increased to $71 million if the San Luis unit is constructed. It just does not make sense for the federal government to build a project which includes the potential for producing power and to dispose of the power potential without any marketing restrictions while compelling its own governmental agencies to pay excessive private power rates for their required electric energy."

SMITH: The charge that preference customers will pay from $31 to $71 million more shows the magnitude of the subsidy "Engle wants all the people to give a privileged few," at a loss to the taxpayers and water users of $310 million.

The $310 million figure represents $165 million in additional revenues which the government would receive from PG&E's use of falling water, and $145 million in taxes, to be paid by the company.

The March of Events

Bill to Control TVA Introduced

A BILL to prevent further expansion of Tennessee Valley Authority facilities without specific approval of Congress was introduced early this month by Senator Cotton (Republican, New Hampshire). Because of a ruling by its general counsel, TVA for more than a year has contended it can expand existing power plants through use of its revenues without consent of Congress.

"TVA was created by the Congress and the taxpayers have spent more than $1.2 billion on its power-producing facilities," Cotton told the Senate, adding: "I believe Congress is entitled to keep some control on what is done with the proceeds of this enormous investment. With the new and powerful steam units now available and the ever-increasing efficiency of transmission lines, TVA could spread over a vast area never contemplated by the Congress and without the approval of the Congress unless this bill or similar legislation is passed."

California

Transit Bill Approved

THE state senate transportation committee recently gave its approval to a watered-down version of a bill designed to set up a mass rapid transit system in the Los Angeles area. Originally, the plan called for the creation of a Los Angeles Metropolitan Transit Authority to establish the system in Los Angeles, Orange, Riverside, and San Bernardino counties. At the request of the senators from the adjacent counties, however, their districts were taken out of the bill and it was left affecting only Los Angeles county.

Assemblyman Charles H. Wilson of Los Angeles, the author of the bill, admitted this move had weakened the measure but said he would not press for the inclusion of the three counties.

Electric Rate Increase Sought

THE California Electric Power Company has applied to the state public utilities commission for a rate increase designed to raise the company's revenues by an estimated $2,008,543 a year. The utility seeks to boost its rates by 9.6 per cent, which would raise the average bill of its residential customers by 33 cents a month, a company spokesman said in announcing the application.

The company needs the higher revenues to offset "greatly increased fuel costs and the general impact of inflation on all phases of our operation," he said.

Oregon

Power Policy Near

THE state senate early this month received a bipartisan-sponsored resolution for constitutional amendment that is designed to meet the objections of some to creation of a state power commission. Various groups do not favor forming of a state power commission that would literally get into the utility business by selling power at retail.

The amendment move, spearheaded by Senator Walter J. Pearson (Portland, Democrat), provides that the commission could "sell and dispose of electric energy on a wholesale basis to others for resale," and removes a present provision that allows selling "directly to industries."

The constitutional provision now allows bonding to 6 per cent of the state's assessed valuation, and the resolution would increase that figure to 10 per cent. Pearson said this would allow issuance of bonds amounting to $200 million.

The proposed amendment would be voted on by the people if approved by the legislature.

Pennsylvania

Gas Rate Reduction Ordered

THE state public utility commission recently ordered a reduction in natural gas rates charged by Manufacturers Light & Heat Company, Pittsburgh, and for the second time in two months called for refunds—this time approximately $550,000. This refund, coupled with a $400,000 rebate ordered March 19th, requires the company to repay nearly $1 million during May and June to its 230,000 residential, commercial, and industrial consumers in 25 counties, most in western Pennsylvania.

The rate cut-refund order was said to have no connection with Manufacturers' newest $6,473,720 annual rate increase proposal on which the state commission opened hearings in Pittsburgh on May 1st.

The commission action was reported to be in line with a state superior court order which, in effect, directed the commission to trim the rates by $360,549 a year and require the firm to make appropriate refunds with interest.

A resolution protesting the proposed gas rate increase by Manufacturers was introduced in the state senate recently. The resolution called upon the public utility commission to reject the raise on the ground that it is unwarranted. It was referred to the state government committee.

Texas

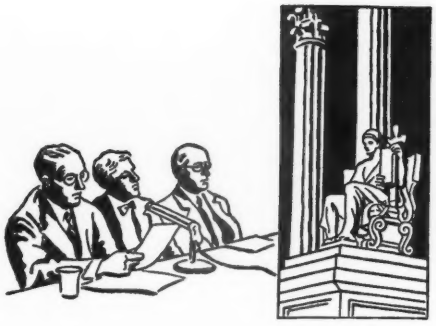
Co-op Regulations Bill Approved

A BILL setting out regulations for electric co-ops to service customers has been passed by both houses of the state legislature but in different forms.

The senate passed the bill and representatives later voiced their approval to a house bill after a large REA delegation tramped across the capitol from the senate to the house chamber.

The bill is an outgrowth of a recent supreme court decision which voided the right of a co-op to serve a customer in an area that becomes nonrural.

Opponents of the measure said they intended to seek speedy action on changes in a joint conference.



Progress of Regulation

Trends and Topics

Sale Price in Relation to Rate Base Theory

VALUATION for the purpose of fixing a proper sale or acquisition price has often been governed by principles differing from those applied in the determination of a rate base. The sale price of property is ordinarily its real market value, what a willing purchaser will pay and what a willing seller will accept for the property. The relationship between valuation for sale purposes and valuation for rate-making purposes, however, cannot be overlooked.

What a property will earn is always a factor. In view of decisions on rate base determination when acquisition cost is higher than original cost (the amount paid for the property when first devoted to public use), the market value is necessarily influenced by the overhanging threat of a rate base lower than the price paid. The price which a commission will approve is influenced by the law governing rate base determination.

Reproduction Cost Evidence in Fixing Sale Price

The New York commission, in its recent decision approving the sale of property by the Cornwall Telephone Company to the New York Telephone Company (17 PUR3d 400) made the pertinent statement that "if reproduction cost is an element in fixing rates, it would logically seem that it likewise must be considered in determining whether the price at which telephone property is transferred is reasonable or whether it will cast a burden upon the public." The commission referred to the decision of the court of appeals in the New York Telephone Company case (12 PUR3d 399) that in fixing rates for telephone companies the commission must consider reproduction cost. The continuing controversy in New York state over reproduction cost as a measure of value for rate making, even involving attempts to overthrow the court's ruling by legislation, is part of the picture.

The question of original cost, reproduction cost, and earning power as evidence of value for the purpose of acquisition by a water authority came before the New York courts a while ago, and it was ruled that each of these evidences

of value must be considered, although no one alone is conclusive (8 PUR3d 306). This has been a generally accepted principle since the New Hampshire commission long ago said that reproduction cost is not the measure of value for transfer purposes but is merely evidence of value (PUR1916E 879).

Earning Power Related to Reproduction Cost

A rate base below actual present value measured by reproduction cost will hold down the earning power, and this fact cannot be disregarded. But, regardless of high reproduction cost evidence in fixing a rate base, high earnings may be impossible. The New York commission, in a case involving the Central New York Power Corporation, said that a company which has little or no earning power has little value, and that a property which continually shows an out-of-pocket loss has no value (57 PUR NS 154). Recognition, said the commission, must be given to a company's current earning power in determining a price to be paid for its stock.

The Wisconsin commission, in a case involving the Wisconsin Hydro Electric Company (65 PUR NS 161), said that reproduction cost is deserving of little consideration in determining the value of utility property, in a proceeding relating to property transfer and security issues, unless the property is able to earn a reasonable return on the reproduction cost. The Securities and Exchange Commission declared that earning power is a paramount criterion of the worth of corporate assets to be taken over in a reorganization and that a valuation of useful property upon a reproduction cost new basis does not afford a controlling criterion in such a case (26 PUR NS 338).

The Illinois commission, in an early case, said that the principal obtaining in the sale of properties, not subject to governmental regulation, that higher values attach on account of liberal earnings, should be recognized by a regulatory commission in fixing the value of a utility's property for the purpose of sale, although earnings cannot be considered in fixing the value for rate-making purposes (PUR1917B 494).

Review of Current Cases

Rate Increase Denied for Failure to Present Rate Base and Cost Evidence

THE Federal Power Commission is not required to detail all elements of proof in giving reasons for suspension or notice of hearing under § 4(e) of the Natural Gas Act. The commission made this statement in denying applications for rehearing and petitions to reopen the record in a proceeding involving increased rates and charges for natural gas produced by Sun Oil Company and others and sold to Transcontinental Gas Pipe Line Corporation. The commission affirmed the initial decision of an examiner dismissing rate increase proceedings.

The producers had renewed a request for reopening of the record. They contended that the commission should have specified that rate base and cost of service

evidence would be considered an essential element of proof of reasonableness of their increased rates. They argued that they were unaware until issuance of the opinion in Re Union Oil Co. of California (1956) 16 PUR3d 112, that they should present rate base and cost-of-service evidence at least as a point of departure in sustaining their burden of proof of reasonableness of the increased rates. The commission said that they were "fully aware that rate base and cost-of-service evidence might be held essential." The Natural Gas Act, the commission declared, imposes an affirmative duty upon the companies to charge and file only reasonable rates and the companies must take the initiative to assure the continuing reasonableness of their rates.

Increased Rates Subject to Commission Review

One of the questions presented was whether the increased rates filed by each applicant were subject to commission review under § 4 of the Natural Gas Act. The commission decided that they were subject to review. Contrary to the companies' contentions, the decisions by the Supreme Court in the Mobile case (12 PUR3d 112) and the Sierra Pacific case (12 PUR3d 122), according to the commission, directly supported its review. The court, in that case, condemned unilateral filings but interpreted § 4 to require the filing, notice, and commission review of changes in any rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto which would be "otherwise valid." The changes proposed in the Mobile case and the Sierra Pacific case were not "otherwise valid." In these proceedings, however, the parties agreed to the changes in rates and the changes were "otherwise valid." The commission therefore had the duty to review these changed rates agreed to between the parties to determine whether they conformed to the standards laid down in the act.

A contention that the increased rates did not constitute "changes" within the meaning of § 4 was held to be erroneous. The facts were clear that a 17-cent rate proposed would change the rate of 9.797 cents per Mcf in effect as of June 7, 1954, and prior to the dates when the respective increases were put into effect. It was said to be immaterial that contracts negotiated prior to June 7, 1954, might have contained "favored nations provisions" contemplating unknown and uncertain future changes. The commission also pointed to the fact that a change in rate is defined to include the operation of any provision of the rate schedule providing for future or periodic changes in the rate charged, classification, or service after June 7, 1954, or the operation of any like provision in any initial rate schedule filed after that date.

This was pursuant to the regulations issued by the commission following the Supreme Court decision that producers' rates came under commission jurisdiction.

Failure to Prove Reasonableness

Upon review of the evidence the commission found that in all essential respects the proceedings were substantially similar to the proceedings in the Union Oil Company case and that the rationale of that decision controlled. The applicants had presented evidence of arm's-length bargaining between the parties and of comparable or market prices in the contract area in southern Louisiana. They had presented general data on a nation-wide basis, including evidence of the concentration of ownership of gas reserves in the United States, the principal uses of natural gas, the principal sources of energy supply, the average value of competitive fuels at

points of production, residential fuel costs, and the ratio of proved reserves of natural gas to net production.

Significantly, said the commission, there was no showing on the record either of revenue requirements or that the increased rates were no higher than necessary to promote exploration for and development of gas supplies while, at the same time, providing protection to the ultimate consumer contemplated by the act. *Re Sun Oil Co. et al. Docket No. G-8288 et al. February 6, 1957, April 5, 1957.*

Arkansas Commission Lacks Authority to Adopt Fair Field Price Method for Gas Rate Making

IN the absence of further legislation, the Arkansas commission has no authority to abandon the rate base theory of rate making in favor of the fair field price basis, the Arkansas supreme court ruled in reversing the commission's stand. While the rate base has not always been arrived at in the same way, under the rate decisions in the state, it was noted, the amount of money a public utility has been allowed to earn has always been limited to a percentage of its invested capital or some other indication of the extent of its capital assets. But in this case Arkansas Louisiana Gas Company was granted a rate increase affecting its large industrial customers "on an entirely different and unrelated method" of determining the allowable rate of return.

In return for the public's concession of virtual monopoly, the utility is obligated under the state law to provide service at the lowest possible rates commensurate with a fair and reasonable return on its prudently invested capital. To this end, said the court, the utility holds and must manage its property in the nature of a trusteeship.

Effects of Commission's Order

The effect of the commission's approval of the proposed rate increase, the court indicated, was to remove about $10 million of production property from the rate base and permit the company, in determining net income, to carry the field price (which it pays for purchased gas) as a fixed operating charge rather than the net cost of production as it has always done under the rate base method. With this production property the company produces about 20 per cent of all the gas it sells to all of its customers. The rest of the gas it sells is purchased on the open market from other producing companies. The company's large industrial customers consume about 80 per cent of all the gas passing through its lines. Since, under the commission's order, the cost of production is the fair field price, the commission would not be concerned with what it costs the company to produce the gas it sells.

The commission's order would also mean that the government's allowance of 27½ per cent on gas-producing wells for income tax purposes would become a tax windfall for the stockholders. It would no longer go to the consumers in the form of a reduction in costs as it would under the rate base method. Likewise, the difference between the fair field price and the cost to the company of producing its own gas would inure to the stockholders.

Furthermore, the court observed, adoption of the fair field price method suggests a violation of the trustee relationship between customers and stockholders. In order to make money for the stockholders

the management would be under a duty to sell its own produced gas at as high a price as possible, while out of loyalty to its customers it would be under a duty to buy such gas as cheap as possible.

The court noted that under the commission's order the stockholders could sell its production properties (taken out of the rate base) and pocket the proceeds without affecting the price consumers would have to pay for gas. But if a utility has the right to dispose of one segment of its assets without any kind of accounting, it might be claimed that it could similarly dispose of another segment or all of its assets.

This, the court said, could defeat the public purpose of utilities.

Statutes and Case Law

The court concluded that the state statutes limit the commission to the rate base method of regulating the allowable return. Running through all the statutes is the idea that return is based on the amount of property owned and on nothing else.

If the fair field price method were adopted, said the court, "it would amount to abandoning our entire previous experiences and legal concepts in rate regulation which have thus far proved fair and satisfactory." The court approvingly referred to a Wisconsin court decision, in 71 PUR NS 65 (affirmed by the Wisconsin supreme court, in 73 PUR NS 97) which commented on a commission finding, in the absence of a rate base, that a certain number of dollars represented a reasonable profit. That court said: "Reasonable profit on what? That is the trouble with the commission's decision. It has no bottom. It has a numerator but no denominator."

Although the company and the commission acknowledged that the fair field price method is relatively new and untried, they pointed to the Panhandle Eastern Pipe Line Company case (3 PUR3d 396) which held that it was not an unlawful method of rate fixing under the provisions of the Natural Gas Act. But the court said the case was not applicable, citing several reasons. First, Panhandle is an independent pipeline company, while Arkansas Louisiana is a utility operating under an exclusive franchise. Second, Arkansas Louisiana bears a trustlike relationship to its customers and the public, which is not the situation in the case of an independent pipeline company. Third, the two situations are not governed by the same statutory provisions. For instance, the Federal Power Commission is under no obligation "to fix rates at the lowest level of reasonableness" but only "to protect consumers against exploitation."

Rate of Return and Other Issues

Recognizing considerable risks inherent in providing gas service to industrial customers, and after separating production properties from the rate base, the commission had fixed 8 per cent as a fair rate of return on gas sold to such customers. The court, however, found no substantial evidence to support this high rate and decided that the commission should adopt 6.34 per cent as being a proper return under the evidence.

The court sustained the commission's allocation of the constant costs of gas transmission from the wells, 50 per cent to coincidental peak use and 50 per cent to the annual volume used. This is a matter that cannot be determined with mathematical certainty, it was said, but must be left to the determination of the commission, based on substantial evidence.

The court also ruled that the commission properly reduced the working capital requirement by only 50 per cent of tax accruals even though it was shown that

70 per cent would be available for company use. Again, this was held to be a matter for the sound judgment of the commission. In arriving at the allowance, the commission had a right to consider other factors than the percentage of advance tax collections.

The commission properly included in the rate base an amount, in excess of the original cost, paid by the company in acquiring production and transmission properties. Some testimony indicated that the company had recouped the amount through earnings in excess of 6 per cent. Among other evidence it appeared that the purchase was made at arm's length and that a substantial part of the company's earnings came from nonutility property. *Acme Brick Co. et al. v. Arkansas Pub. Service Commission et al. 299 SW2d 208.*

Replacement of Lateral Gas Pipeline Authorized Along with Sales for Boiler Fuel

THE Federal Power Commission has adopted the initial decision of a presiding examiner, in a proceeding under § 7 of the Natural Gas Act, approving an application by Cities Service Gas Company for authority to abandon and reclaim or salvage a 17-mile lateral transmission line serving several towns in Missouri, and to construct new facilities to maintain service to the towns. A proposal to furnish interruptible gas as boiler fuel for an electric generating station was also approved. Exceptions to the decision had been filed by intervening coal interests.

The line proposed to be abandoned was in such bad condition that more than a fourth of the gas passing through it was lost by leakage. It would cost substantially more to repair the line than to construct the proposed new facilities. As a consequence of the abandonment, however, service to eight farm-tap customers along the right of way would have to be discontinued. It would not be practicable to serve them from the new line.

The examiner said the disadvantage to these few customers must be weighed against the convenience and necessity of the much larger public which will benefit directly or indirectly from improvement of the facilities. The examiner thought the company had made an ample showing in this regard. Construction was to be financed with treasury funds.

Interruptible Service

The company's gas reserves were found to be adequate to permit interruptible service to the generating station. With the sale to the station, the "life index" of the dedicated reserves would be reduced from 26.82 years to 26.38 years, a difference of only four months. This evidence was uncontradicted. The rate proposed for this service was shown to be compensatory.

On the question of public interest, it appeared that the electric company would enjoy considerable fuel-cost savings by using natural gas. Such savings, under existing contracts, would be passed along to the electricity-consuming public.

Competition with Coal Industry

Intervening coal interests undertook to show the estimated reserves of deliverable natural gas in the area apparently on the theory that such evidence would permit them to argue that since the "life index" of coal reserves was much greater than that of natural gas, the application should be denied. This evidence was excluded, the examiner holding that it had no probative value. The coal interests failed to show

any specific detriment that would result to them from gas service to the generating station, though obviously some loss of coal sales would be sustained. But economic loss to the coal interests, said the examiner, is not of itself a valid reason for refusing a certificate of public convenience and necessity to a natural gas company. To give such an effect to the Natural Gas Act, it was said, would be to stultify the natural gas industry, reserving all markets to competing interests regardless of public benefits to be derived from natural gas service. Under the Natural Gas Act, the commission's jurisdiction is fixed by the requirements of public convenience and necessity. *Re Cities Service Gas Co. Docket No. G-10458, April 11, 1957, affirming examiner's decision of February 19, 1957.*

Rural Electric Co-operative Lawfully Invades Area Served by Private Company

ALTHOUGH a private electric company had been serving a rural area for twenty years under claim of certificate authority, the South Carolina supreme court held that the company was not entitled to an injunction to restrain a rural electric co-operative from providing service in the area.

The pertinent statutes fail to limit the right of a co-operative to serve customers which are being served by a private company. It must be assumed therefore, said the court, that the legislature intended for the co-operatives to serve all rural areas regardless of whether they are being served by private electric companies. That competition by the co-operatives might injure or even ruin a private company does not make such competition illegal. In this respect, the court observed, the instant case is a clear one of *damnum absque injuria* (harm without legal injury).

No Valid Noncompetition Agreement

The company sought to show that, as a part of a property transfer agreement, an oral agreement had been made whereby the co-operative undertook not to offer service in the disputed territory. However, the transfer agreement as finally reduced to writing was void of any provision relating to noncompetition. Under the legal rule governing parol evidence, the company could not be permitted, in this proceeding, to modify the written instrument by showing an oral agreement restricting the co-operative's service rights in the area. The company therefore could not make out a case for an injunction on the ground of violation of agreement. *Heath Springs Light & P. Co. v. Lynches River Electric Co-op., Inc. 97 SE2d 79.*

Co-operative Properly Enjoined from Interfering With Electric Company Line Construction

THE Colorado supreme court ruled that an injunction was properly issued to restrain an electric co-operative from interfering with the construction of a power line by an electric company in the latter's authorized territory. Although the co-operative had no members in the area, it had nevertheless proceeded to erect a parallel line so close to the company's construction that wires overlapped, with

resulting danger to life and property. The court observed that such conduct was reminiscent of the railroad wars of the 1870's.

For a number of years up to the time of this controversy the parties had observed an agreement whereby the co-operative would not furnish service in the area. The court noted that they were well within their rights in entering into this agreement, for nothing in it tended to impair the obligations of the company to serve the public, or the co-operative to serve its members.

Court Jurisdiction Questioned

The co-operative sought to defeat the trial court's jurisdiction by claiming public utility status. In consequence of such status the commission and not the trial court, it was asserted, had sole jurisdiction over the controversy. The court rejected this argument, declaring that the co-operative could not thus evade the consequences of its unlawful acts. Whether the co-operative was a public utility, said the court, was immaterial in this case.

If the co-operative desired to serve in the disputed area, it had no superior right over the company which was authorized by the commission to furnish service. In any event, said the court, the co-operative had no right to pursue the dangerous course of intermingling its electric wires with those of the company. Such unlawful conduct produced an intolerable situation which called for intervention by a court of equity. *Intermountain Rural Electric Association, Inc. v. Colorado Central Power Co. 307 P2d 1101.*

Co-operative Denied Authority to Serve Nonmembers in Area Annexed to City

An electric co-operative's contention that it had the right to extend service to residents of an area that had been annexed to a city was not in accord with the Electric Co-operative Corporation Act, according to the Texas supreme court. The purpose of the ECC Act, pointed out the court, is to authorize the formation of co-operatives in order to make electric current available to rural areas. Whatever powers co-operatives possess are derived from, and measured by, the act.

Co-operatives were limited to serving members only, under the statute. Persons living in an area not included in a city, town, or village having in excess of 1,500 inhabitants were not qualified to become members. As an added emphasis of the fact that membership in co-operatives was strictly limited, the act provided that a certificate of membership was not transferable. It seemed clear to the court that inhabitants of the area under contention did not live in a rural area and were not qualified to become members of the co-operative. That was true of those residing within as well as those residing without the annexed area.

Continued Service to Members

The question which caused the court most difficulty was whether the co-operative could continue to serve persons residing in the annexed area who were lawful members of the co-operative at the time of annexation. Lawful membership once acquired, held the court, is not terminated by annexation by a city of the area in which the member resides.

The statute provided that membership

could be terminated by resignation, expulsion, or death of a member. There was no provision that it was terminated by annexation. Since members retained that status after annexation, and since the cooperative was expressly authorized to supply electric energy to members, it was the court's view that it was authorized to continue service after annexation. *Texas ex rel. Southwestern Gas & E. Co. et al. v. Upshur Rural Electric Co-op. Corp. et al. 298 SW2d 805.*

Rate Increase Granted Despite Unreliable Records

THE Florida commission granted a rate increase of 10 per cent for Central Florida Gas Corporation although the records and accounts upon which the rate base was calculated were found to be unreliable and not in conformity with the Uniform System of Accounts. The commission was satisfied, however, that the increase was justified. Even with the higher rates, the company would still operate at a net loss, according to both the company's and the commission's calculations. But the increase was expressly conditioned on the company's engaging a qualified accountant to analyze and correct the books and records.

The company proposed to apportion administrative and general expenses between its manufactured gas operations and liquefied petroleum gas operations so as to attain a closely identical ratio of revenues to expenses for both departments. The commission adjusted this apportionment on the basis of the number of customers the separate operations served, since the volume and nature of work in this expense category would be determined largely by the number of customers served. The commission thought this apportionment on a customer basis would be more equitable.

A proposal to convert rates from a volumetric to an equivalent therm basis was also approved. *Re Central Florida Gas Corp. Docket No. 4967-GU, Order No. 2463, March 25, 1957.*

Minimum Gas Charges Increased and Tax and Fuel Clauses Approved

CITING increased operating costs, the Gainesville Gas Company obtained the approval of the Florida commission to increase its minimum charges 50 cents per month and to establish fuel and tax adjustment clauses. The company's rate of return was found to be deficient. After giving effect to the proposed minimum increase, the resulting rate of return would be only 1.48 per cent.

Working Capital and Other Adjustments

Cash working capital allowance was determined by computing one-eighth of the annual operating expense less fuel cost. The provision for fuel (materials and supplies) was ascertained by calculating the ratio of total fuel stocks to total issues and applying the ratio to the average monthly issue. This calculation produced an allowance in direct relation to the actual experience of the company. The company's proposed provision for fuel allowance was based on one-eighth of a 45-day supply, or approximately six and one-half days' requirements.

Since no interest was paid on customer deposits and they were available for company use, the commission excluded them from the rate base.

The company sought to include "Corporation Income Tax" in operating revenue deductions. This item was eliminated because it would be more than absorbed by an amount for "Interest on Long-term Debt."

Fuel and Tax Adjustment Clauses

The proposed fuel adjustment clause provided automatic compensation for unaccounted-for gas, which amounted to 17.1 per cent during 1956. Although the commission did not object to considering unaccounted-for gas in the fuel adjustment calculation, it thought the actual loss of 17.1 per cent was unreasonably high. In authorizing the fuel clause, it reduced the allowance for gas loss to 10 per cent, which it found to be "sufficiently liberal and compensatory." To include the entire loss, said the commission, would be to require the consumer to subsidize inefficiency, and it would eliminate any incentive on the part of the company to reduce the unaccounted-for loss.

The fuel clause was approved as follows: "For each .6 cent (or major portion thereof) over 9.5 cents or under 7.5 cents delivered cost per gallon of propane, a corresponding increase or decrease of .842 cent per therm shall be applied to the gas rates for billing in the following month."

The authorized tax adjustment clause provided for the addition to all bills, including minimum bills, of the proportionate share of any tax, license, or assessment imposed by any governmental authority, which may affect the company's operating cost, whatever the basis on which it might be applied, where direct allocation would be possible.

Conversion to Therm Rates

Conversion of rate schedules from volumetric to an equivalent therm basis was authorized.

The change would neither increase nor decrease the effective rates. It would, however, eliminate the necessity of using multiplying factors in the event the company should make future changes in the Btu content of its manufactured gas. *Re Gainesville Gas Co. Docket No. 4980-GU, Order No. 2462, March 25, 1957.*

Normalized Theory Applied to Rapid Depreciation Accounting for Income Tax Results

THE Colorado commission approved an electric company's method of accounting for federal income tax results from accelerated depreciation of property taken pursuant to § 167 of the Internal Revenue Code of 1954. The company had tentatively determined to employ the declining balance depreciation method. The net effect would be to reduce income taxes during the earlier years and increase them during later years.

In approving the method, the commission commented that certain facts appeared fundamental. The actual effects of the application of liberalized depreciation as provided in § 167 are historically unknown at this time. Application of liberalized depreciation may extend over the service lives of depreciable property, much of which may range around thirty years, in contrast to the situation with regard to the 5-year amortization provided under § 168 of the Internal Revenue Code of 1954. Under certain combinations of fac-

tors, the use of liberalized depreciation might result in actual tax savings and not in mere deferment of payment of tax.

In view of such facts, said the commission, and of the indeterminate possibilities of the ultimate effect of the utilization of liberalized depreciation, public interest would best be served by causing the company to record on its books amounts representing the difference in taxes computed by using regularly applied book depreciation and by using the liberalized method elected by the company under § 167.

No one at this moment, said the commission, can say positively that the use of liberalized depreciation will result in what would amount to tax deferral or tax saving. Therefore, the commission held that the proposed accounting by the company should not bind the commission in any way as to future treatment, for rate-making purposes, of the funds which would be in the account entitled "Earned Surplus Restricted for Future Federal Income Taxes." The funds so accounted for in that restricted surplus account, directed the commission, shall not be available for dividends. *Re Home Light & P. Co. Application No. 15030, Decision No. 47650, April 5, 1957.*

Massachusetts Commission Rules on Fuel Clauses

THE purpose and justification of a fuel adjustment clause, pointed out the Massachusetts commission in a recent case approving a gas company's clause, are to stabilize earnings of certain utilities where fuel costs are an important element in operating expenses. The currently volatile nature of fuel prices substantially affects the earnings of such utilities. The clause tends to reduce sharp fluctuations, by permitting a utility to recover added cost of fuel prices, and by requiring the utility to pass the benefit of fuel price reductions on to customers.

The experience of the company seeking approval of the fuel clause provided a good example. In the latter months of 1956, the cost of propane had been increased to 13 cents per gallon from 11.4 cents. This would result in an increase in the cost of propane purchased for a full year on the basis of 1956 quantities in an amount which represented about 25 per cent of the 1956 net income of the company.

The commission authorized the company to put into effect the new fuel clause, under which the charge for gas would be increased or decreased at the rate of one cent per hundred cubic feet as the cost of propane might increase or decrease one cent per gallon from a specified price of 11.4 cents per gallon. *Re Ware Gas Co. DPU 12085, April 5, 1957.*

Other Rulings

In two other cases, the commission passed upon the question of fuel clauses. In the Plymouth case, it was held to be in the public interest to permit the fuel clauses of two electric companies to be operative on all classes of customers, including residential accounts, because of the highly seasonal nature of operations.

The commission directed two electric companies, in the Cambridge case, to resubmit fuel clauses using base costs for gas above or below which fuel adjustment charges would be computed as actual gas costs varied. *Re Plymouth County Electric Co. DPU 12041, April 12, 1957; Re Cambridge Electric Light Co. DPU 12094, April 12, 1957.*

Commission Empowered to Order Intercompany Extended-area Dial Service

THE Ohio supreme court has affirmed a commission order requiring two telephone companies to inaugurate reciprocal, extended-area dial service between their respective exchanges at Wooster and Congress. The court held that the commission is empowered by statute to order such service where public convenience and necessity reasonably demand it.

Only one of the companies appealed from the commission order. It contended that there was not a sufficient community of interest between the two localities to warrant the service required.

Extended-area service in relation to separate telephone companies enables a subscriber of one exchange to call a subscriber of another exchange without paying a separate charge. Telephone subscribers are increasingly demanding this service, the court noted.

Evidence indicated a considerable interchange of communications between the two exchanges, involving professional, business, emergency, and social matters. The great majority of the people residing in the Congress area transact their business in Wooster, which is the county seat. The Wooster exchange has approximately 9,700 subscribers, while the other has only 200. The exchanges are 13 miles apart. It was estimated that the cost of establishing the extended-area service would be less than $12,000.

Surveys showed that 152 Congress subscribers made 710 toll calls to the Wooster exchange during a 30-day period, while about 20 calls a day were made from Wooster to the Congress exchange. The court thought the number of calls each way was not disproportionate.

Necessity of Valuation

In contesting the order, the company cited a statute providing that no arrangement by which two companies merge or operate their plants in connection with each other shall be valid until the commission has determined a property valuation. The court interpreted this statute, however, as referring to a voluntary union or association but not contemplating a situation where two separate companies are ordered to join facilities in the public interest.

Those subscribers benefiting from the extended-area service will undoubtedly have to pay for it in the form of increased rates, the court observed. But that problem would be one for the future. The court indicated that the commission has abundant authority to establish new rates which will be reasonable to the subscribers and fair as between the companies, insuring to the latter a fair return.

Constitutional Aspect

Judge Taft, in a concurring opinion, pointed out that if the company operating the Wooster exchange were required to furnish facilities for the subscribers of the other company, without compensation to itself or its subscribers, such requirement would violate not only the state statutes but the Fourteenth Amendment as well. It would constitute a taking of property without due process of law.

On the question of the relative advantages of the subscribers of the two exchanges, the judge observed that the Congress subscribers, after the commission order, will be able to contact an additional 9,700 parties, while the Wooster subscribers will be able to call only 200 more parties. To that extent, it was calculated that by reason of the order the Congress subscriber would be 4,850 per cent better

off, while the Wooster customer would be only 2 per cent better off.

The judge thought the quoted statute, relating to the operation of separate plants in connection with each other, contemplates these considerations and requires a valuation and establishment of rates before the joint operation is undertaken. Judge Taft concurred with the majority, however, because he felt that it had not been decided whether the Congress subscribers could be required to pay the other company for the use of its facilities made available to them. Compensation, moreover, had been neither requested nor refused. *Ohio Central Teleph. Corp. v. Ohio Pub. Utilities Commission, 140 NE2d 782.*

Other Recent Rulings

Refund to Gas Consumers. The Manufacturers Light & Heat Company, in making refunds necessitated by a recent Pennsylvania court decision reducing its allowable return from 6.50 per cent to 6.31 per cent, obtained the commission's approval of the ascertainment of the refund due each individual customer on the basis of quantity of gas taken during the refund period, with interest at 6 per cent. *Pennsylvania Pub. Utility Commission et al. v. Manufacturers Light & Heat Co. C. 16005 et al. March 18, 1957.*

Jurisdiction over Taxicabs. A federal court of appeals has upheld a ruling of the District of Columbia commission that it had not been delegated authority to limit the number of taxicabs that may be licensed in the District; that power was lodged in the commissioners of the District of Columbia. *Associated Taxicab Operators, Inc. v. Hayes et al. 240 F2d 638.*

Water Utility Sale to City. In approving the sale of a water utility to the city which it served, the Missouri commission observed that in such a case it would not disregard the city's (and municipal voters') determination of the public interest involved unless it should clearly appear that the sale would result in a deterioration of water service, inability of the city to expand facilities to meet future public demands, or other substantial detriment to consumers. *Re Sedalia Water Co. Case No. 13,628, March 25, 1957.*

Intrastate Rates Fixed by ICC. A United States district court upheld an order of the Interstate Commerce Commission prescribing intrastate rail freight rates on the ground that existing rates were unduly prejudicial to interstate rates, the order being supported by substantial evidence. *Cleveland Electric Illum. Co. v. United States, 147 F Supp 622.*

Television Construction Permit. A Federal Communications Commission finding that a modification of a television construction permit which allowed the holder to bring its transmitter closer to another city than previously authorized did not make the station in reality a station of the other city was sustained by the United States court of appeals as supported by the evidence. *Houston Consol. Television Co. v. Federal Communications Commission, 240 F2d 409.*

Stay Pending Rule Making. The United States court of appeals held that a UHF permittee was not entitled to a

stay of proceedings on applications for licenses for two VHF stations in the same general area pending rule making by the Federal Communications Commission with regard to intermixture of VHF and UHF channels. *Gerico Investment Co. v. Federal Communications Commission, 240 F2d 410.*

Telephone Directory Advertising. The St. Louis court of appeals held that the running of advertisements in the classified section of a telephone directory is not a public service but a matter of private contract between the subscriber and the telephone company. *Mitchell v. Southwestern Bell Teleph. Co. 298 SW2d 520.*

Sufficiency of Findings. The Texas court of civil appeals affirmed a lower court's order voiding a commission grant of certificates to specialized motor carriers where the commission, instead of making findings required by statute, had adopted findings made in another proceeding. *Texas R. Commission et al. v. Alamo Express, Inc. et al. 298 SW2d 926.*

Writ of Mandamus Improper. In reversing a lower court decision granting a peremptory writ of mandamus to compel a railroad to restore certain service, the Nebraska supreme court pointed out that such a writ may be issued without notice only where there is no room for controversy as to the right and where, from the facts set forth in the supporting affidavit, the court can take judicial knowledge that there can be no valid excuse for failure to perform the act in question. *Nebraska ex rel. Beck v. Chicago, St. P. M. & O. R. Co. 81 NW2d 584.*

Burden of Proof. The Pennsylvania superior court, in upholding a commission order granting additional authority to a motor carrier, observed that the burden of proof for such authority is met by showing that the proposed service is reasonably necessary for the accommodation or convenience of the public, or by establishing that existing service does not satisfy the public need and that the proposed service will tend to correct or substantially improve that condition. *Daily Motor Express, Inc. et al. v. Pennsylvania Pub. Utility Commission, 130 A2d 234.*

Bonds to Finance Conversion. The Wisconsin commission approved the separate applications of two telephone companies for authority to issue first mortgage bonds in order to finance net additions to plant in service in connection with conversion to automatic dial operation. *Re St. Croix Teleph. Co. 2-SB-675, March 5, 1957; Re North-West Teleph. Co. 2-SB-676, March 4, 1957.*

Telephone Company Mortgage. The Illinois commission approved a telephone company's application for authority to execute a mortgage covering all its property with the exception of cash, accounts receivable, motor vehicles, and current inventories of materials and supplies as security for a loan obtained to finance plant improvement. *Re Okaw Teleph. Co. No. 43823, March 20, 1957.*

Gas Rate Rehearing Denied. In the absence of new facts or principles of law, the Federal Power Commission denied rehearing of its recent order disapproving natural gas producer rate increases for failure of the applicants to sustain the burden of proof as to the reasonableness of the increases. *Re Orange Grove Oil & Gas Corp. et al. Docket Nos. G-8518, G-8519, March 28, 1957.*

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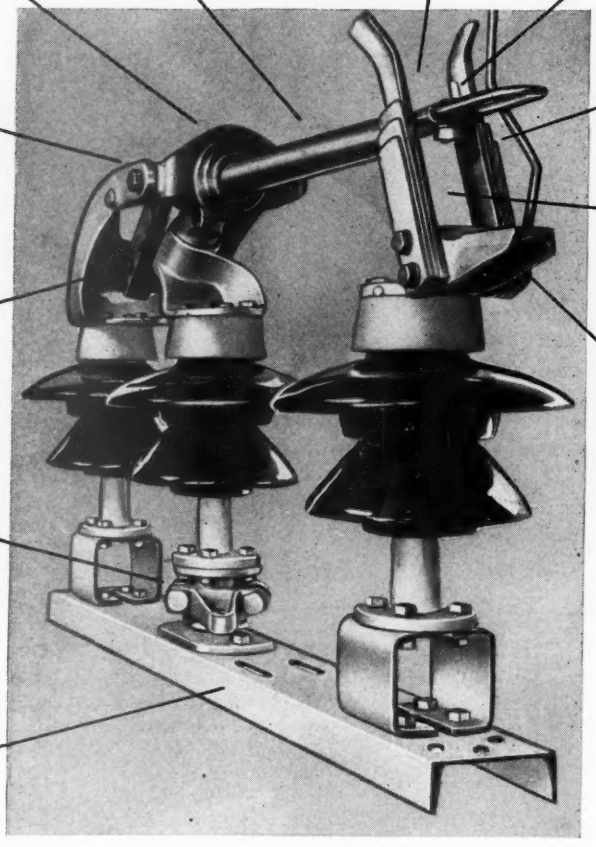

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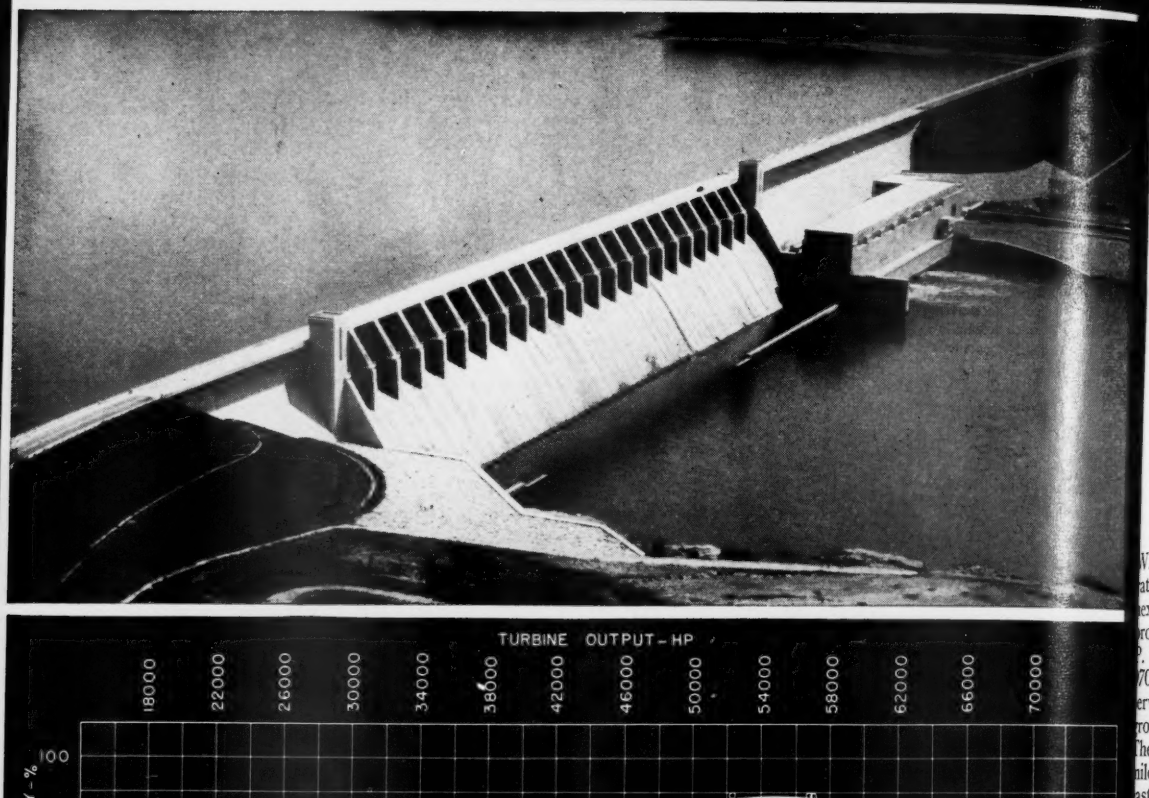

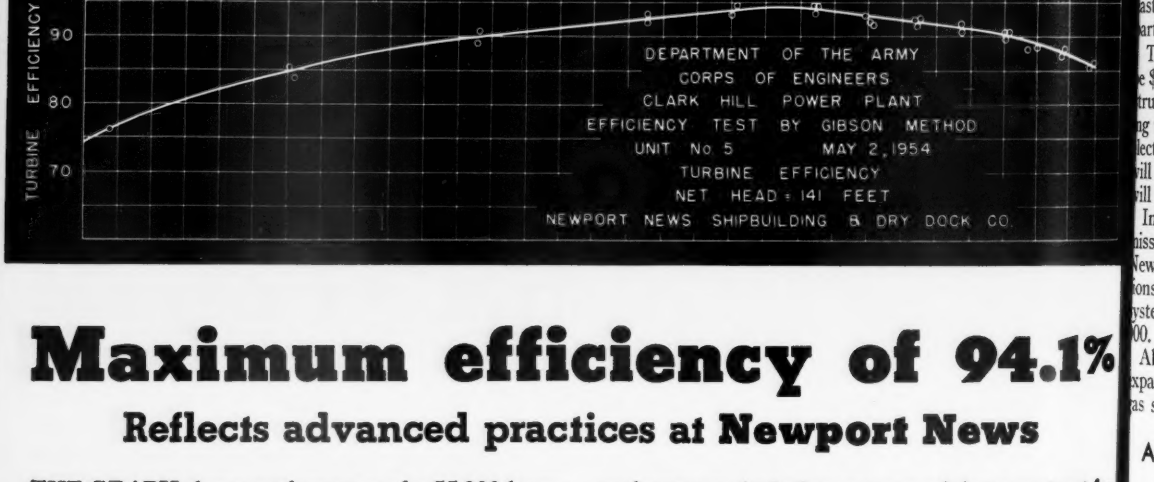

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Reflects advanced practices at Newport News

THE GRAPH shows performance of a 55,000 horsepower turbine, one of seven such units built by Newport News for the Clark Hill Power Plant (see photo).

Shape of the curve is typical . . . not exceptional . . . for Newport News turbine performance. Regular, uniform, showing no-cut-off at full load, it indicates consistent delivery and stable operation.

And especially, experience in design and model testing.

At Newport News, turbine runners are continually being designed and redesigned for improvements in performance. And often upon receiving a contract for turbines, a model setting is built and complete tests made. So far, Newport News has filled turbine contracts with an aggregate rated output in excess of 7,000,000 horsepower.

Penstocks, spiral casings, valves, pumps, rack rakes and other essentials are also designed and built by Newport News. Our illustrated booklet, "WATER POWER EQUIPMENT," will be sent to you upon request.

Engineers . . . Desirable positions available at Newport News for Designers and Engineers in many categories. Address inquiries to Employment Manager.

Newport News

Shipbuilding and Dry Dock Company
Newport News, Virginia

Industrial Progress

Wisconsin Public Service to Spend $14,970,000 on Construction

WISCONSIN Public Service Corporation will spend $41,000 a day for the next twelve months for new and improved facilities, according to Harold F. Taylor, president. A total of $14,970,000 will be invested in facilities to serve new customers and to meet the growing needs of present customers. The company serves a 10,000-square-mile area in north central and northeastern Wisconsin, and an adjacent part of upper Michigan.

The largest single expenditure will be $6,305,000 to be spent on the construction of a 75,000 kilowatt generating unit addition to the Pulliam steam electric plant in Green Bay. The unit will ultimately cost $13,500,000 and will be completed late in 1958.

Improvements to the electric transmission system will cost $600,000. New substations and substation additions will cost $726,000; distribution system expenditures will cost $3,470,000.

About $2,500,000 will be spent in expanding and improving the utility's gas system.

AEC Contracts with NDA For Work on New Reactor System

THE Atomic Energy Commission has contracted with the Nuclear Development Corporation of America, White Plains, New York, for research, development and preliminary design work necessary to demonstrate the feasibility of a liquid sodium cooled, heavy water moderated reactor system. The estimated cost of the work under this contract is $1,725,000.

The work looks toward the construction and operation of a nuclear electric plant in Anchorage, Alaska under a three party agreement now being negotiated among the Nuclear Development Corporation, the Chugach Electric Association of Anchorage, Alaska and the Commission.

The work to be done by the Nuclear Development Corporation was outlined in a proposal for a 10,000 electrical kilowatts capacity nuclear electric plant made jointly to the Commission by the Chugach Electric Association and the Nuclear Development Corporation, in response to the second invitation under the Commission's Power Demonstration Reactor Program. The Commission on August 28, 1956 announced that it had authorized, as a result of the proposal, negotiations which would determine the kind of assistance to be given to the Chugach-NDA group.

The project has been divided into three phases: first, initial design and development; second, final development and engineering design; third, construction, start-up and operation. The contract with the Nuclear Development Corporation covers work under the first phase. Negotiation is under way on a contract with the Chugach-NDA group which would cover the remaining phases of the project. These remaining phases would be undertaken only if the preliminary work to be done under the NDA contract demonstrates that the reactor concept is feasible.

The Commission has determined that successful combining of heavy water as moderator and liquid sodium as coolant would constitute an important technical advance in power reactor technology. Although extensive technical knowledge has already been developed on the use of either heavy water or liquid sodium in reactors, a significant amount of research and development is considered necessary to develop technology combining the two in a single reactor system.

West Penn Power Announces $61 Million Expansion Program For 1957-58

WEST Penn Power Company has mapped construction and expansion projects totaling $61,000,000 for this year and next, according to P. H. Powers, president. The $35,000,000 scheduled for 1957 will be the largest single-year expenditure in company history for additional and improved facilities. The company has spent $172,000,000 on expansion during the past ten years.

Greatly increasing use of electric service, coupled with future needs of West Penn's 365,000 customers in an 8,775-square mile service area in Western and North Central Pennsylvania, will require the huge expansion program.

Currently, West Penn's largest single project is the additional generating capacity to be provided by the new Armstrong power station north of Kittanning. The first 165,000-kilowatt generating unit is scheduled to go "on the line" in the early summer of 1958, to be followed by another unit of about the same size.

Other power station construction of a nature that does not affect total generating capacity includes projects at Springdale, Mitchell, and Windsor Power Stations.

One major line project that adds another link to the key 132,000-volt transmission system is nearing completion. It is from Armstrong station to Kersey (near Ridgway), and connects with other 132,000-volt lines at both ends.

Several other projects involve expenditures in the vicinity of a half million dollars, all or part of which is planned for 1957.

These include a major substation with connecting lines on the western edge of Washington, a new substation adjacent to Connellsville power station, an additional line and increased capacity at Bredinville substation at Butler, a new substation and lines on the edge of Latrobe, another new substation and lines near Irwin, and still another new substation and related line improvements in the vicinity of Elizabeth.

Other projects planned by West Penn are in the bracket from $10,000 to a quarter of a million dollars.

94 Utilities Awarded Certificates by PUAA

NINETY-FOUR utility compani were honored recently during t Public Utilities Advertising Assoc tion's 36th Annual Meeting in Cle land for outstanding advertising p pared during 1956.

Award certificates were present to winning-company advertising e ecutives in recognition of advertisi which survived judging in 21 diff ent classifications. Every phase of a vertising conducted by investor-own operating utilities throughout t United States, Canada and Haw was judged in the contest.

More than two thousand entr were received in this year's PUA Better Copy Contest, the oldest c tinuously conducted contest in the a vertising field. A total of 189 awar was presented by Frank C. Lietz, a vertising manager of Northern I nois Gas Company, Bellwood, Illino who served this year as chairman the Better Copy Contest.

Leading the winners in number awards received was the North

(*Continued on page* 24)

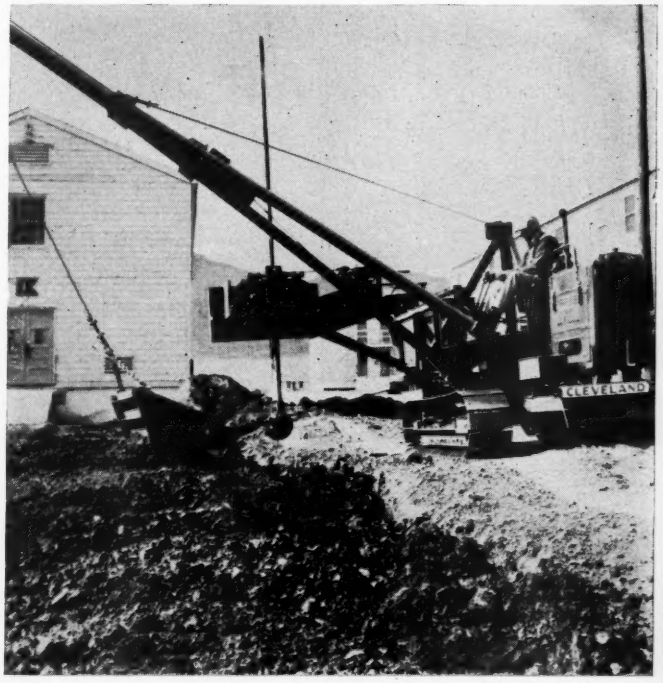
The CLEVELAND 80W replaces 6 men, 4 machines

...and does the job in half the time!

Don Rogers, superintendent of Charles Ramsey and Company of Fort Carson, Colo. has this to say about the performance of his new Cleveland Model 80W on a job of backfilling and compacting trench for the U. S. Army at Camp Carson:

"On this job, the 80W has replaced a large tractor, a 210 cu. ft. air compressor, two triple tampers and 6 men, and is doing the job in half the time."

"I'm paying this machine the supreme compliment of saying that it is the only machine I have ever seen that puts the dirt back in the ground as well as a Cleveland 140 trencher takes it out."



The CLEVELAND 80W

A SIDECRANE

- Lays Pipe — 30,000 ft. lb. capacity
- Power Boom — Up and Down
- 4 Line Speeds
- Long Reach — 21 Feet
- Sets Bends, Valves
- Unloads — Strings — Pulls Sheathing, etc.

A BACKFILLER

- 4½ Foot Scraper Board
- Backfills Clean
- Backfills Fast — 20 Passes Per Minute
- Stays Off Completed Work
- Backfills from Either Side of Trench
- Works Safer — Parallels Work
- Fits All Job Conditions

A TAMPER

- Fills and Tamps Simultaneously
- Meets Density Specifications
- Tamps From The Bottom Up
- Parallels Work — No Straddling
- Tamps Wider — Tamps Safer

ONE MACHINE...ONE OPERATOR...DOES IT ALL

Good Everywhere

THE CLEVELAND TRENCHER COMPANY

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States Power Company (Minneapolis), who received seven. Consolidated Edison Company of New York, Inc. (New York) was second with six awards.

Seven companies—The Cincinnati Gas & Electric Company (Cincinnati), The Cleveland Electric Illuminating Company (Cleveland), The East Ohio Gas Company (Cleveland), Laclede Gas Company (St. Louis), Pacific Gas and Electric Company (San Francisco), South Jersey Gas Company (Atlantic City), and Wisconsin Public Service Corporation (Green Bay)—each received five awards. Six companies—Commonwealth Edison Company (Chicago), The Hartford Gas Company (Hartford), Houston Natural Gas Corporation (Houston), Indianapolis Water Company (Indianapolis), Southern Union Gas Company (Dallas), and Virginia Electric and Power Company (Richmond)—received four awards each.

Three awards were received by British Columbia Electric Co., Ltd. (Vancouver), The Connecticut Light & Power Company (Hartford), The Hartford Electric Light Company (Hartford), The Hawaiian Electric Company, Ltd. (Honolulu), Minneapolis Gas Company (Minneapolis), New Orleans Public Service, Inc. (New Orleans), Texas Eastern Transmission Corporation (Shreveport), Union Electric Company (St. Louis), and The Washington Water Power Company (Spokane).

Twenty companies picked up two awards each, while 50 companies received one each.

In addition, a special award went to the Guaranty Trust Company of New York for "outstanding advertising published in support of private enterprise in the public utility industry."

United Gas Improvement Has $37,000,000 Expansion Program

A $37,000,000 expansion program covering a five year period is under way at United Gas Improvement Company, E. H. Smoker, president, told the N. Y. Society of Security Analysts recently.

Mr. Smoker reported that gas sales last year increased by 20 per cent; and he forecast that the rise in 1957 will be higher. House heating customers now amount to 16.5 per cent of the company's total number of residential customers, and it was stated that there is still a large market for this class of business.

UGI expects to go into the liquefied petroleum gas business in what it describes as "one of the finest rural area in the United States."

Chesapeake & Potomac Tel. Has Expansion Program

THE Board of Directors of th Chesapeake and Potomac Telephon Company appropriated $725,000 fo plant additions and improvements i the District of Columbia at their regu lar monthly meeting recently.

The major portion of the appro priation, according to H. Holme Vogel, vice president in charge of th Washington Company, will be use for the installation of additional di central office equipment in variou wire centers and for new cable in th Anacostia and Brookland areas.

Telephones in service in Washing ton continued to grow, and at the en of the month there were 572,962, a increase of 17,295 over March, 195

Demand Meter Kit Developed By Allis-Chalmers

A DEMAND meter kit for use b utilities in making load surveys o feeders for planning guidance ha been announced by Allis-Chalmer Manufacturing Company.

Easily mounted on Allis-Chalmer distribution voltage regulators, th meter responds to the heating effe of the load in amperes—the limitin factor of the circuit capacity.

A current transformer which step up the control current to the desire meter current is mounted inside th meter. This current transformer ha two taps which make it possible t read either 3 amperes or 6 ampere full scale deflection. The taps can b changed by two metal strips on th rear of the meter.

VEPCO Cited by United Shareholders of America

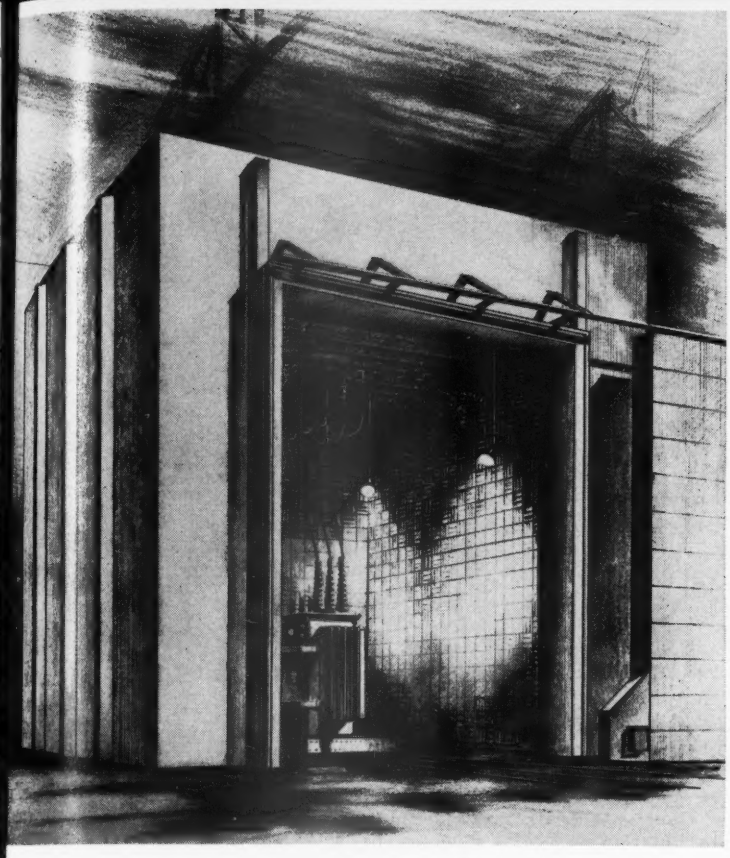
THE Virginia Electric and Powe Company was awarded a citation fo meritorious achievement in the field o management-shareholder relations fo the third consecutive year, accordin to Hitch, vice-president.

The award is given annually by th United Shareholders of America, non-profit organization of shareholde ers in American businesses.

The award was presented to coin cide with the annual meeting of stock holders of Vepco.

The citation, presented for "encour aging participation in American co porate ownership," was awarded t Vepco in 1956 and in 1955.

Vepco is owned by more than 32 000 shareholders in all the 48 state and 21 foreign countries.



VERY "HUSH HUSH"

The new Westinghouse Anechoic Vault recently dedicated at its Sharon, Pennsylvania transformer laboratory is equivalent in size to a five-story building, with walls five feet thick and a 150-ton door.

As Westinghouse stated—"Here the biggest transformers to be built in the foreseeable future will be tested for noise reduction."

Engineers at Commonwealth Associates Inc. were responsible for the structural and acoustical engineering design for this Westinghouse project.

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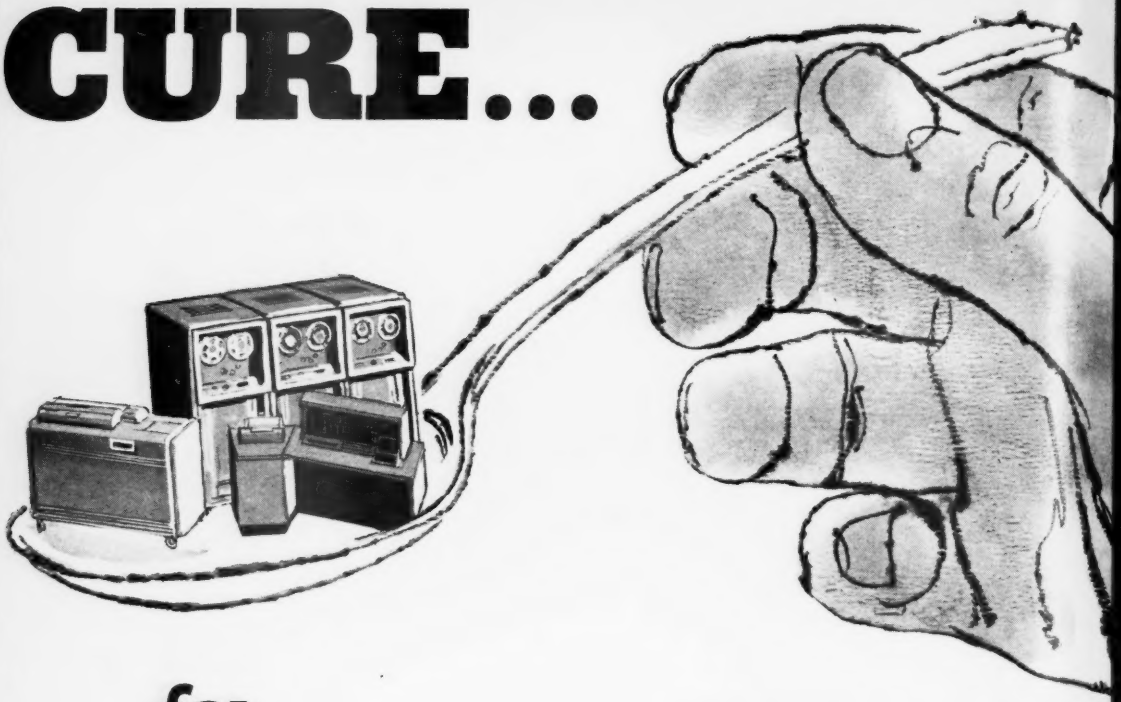

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Drivers get set to "hit the road" with the first of the 1000 new Power Giants ordered by Ryder System, Inc.

Dodge awarded 1000-truck order

"We picked these Dodge Power Giants to give our truck-lease customers the finest hauling and delivery operation at lowest cost", James Ryder (right), president of Ryder System, Inc., tells Lee F. Desmond, vice president of Dodge.

Ryder System, Inc., world's largest exclusive truck-leasing company, puts low-cost operation first... picks Dodge for record order

When your business is leasing trucks, there's only one way to make it pay off. And that's by keeping your operating costs per mile at rock-bottom levels. That's why Jim Ryder, president of Ryder System, Inc., decided on Dodge when he needed new trucks. He knew that Dodge trucks are built to take extra miles without extra costs.

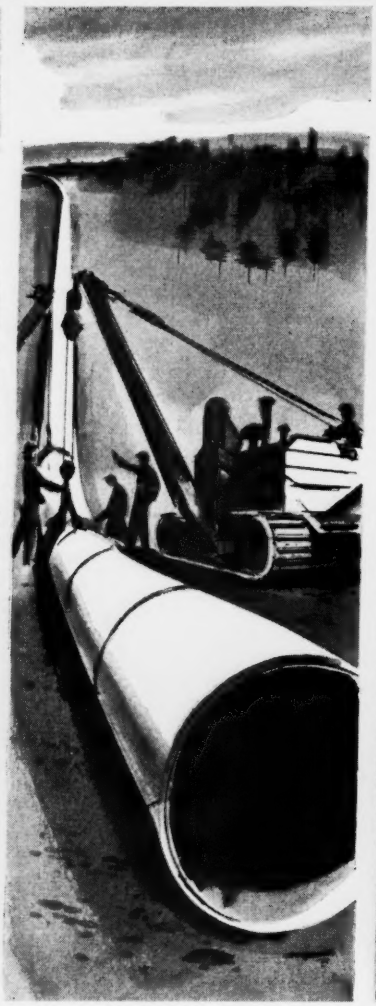
For instance, new Dodge *Power Giant* V-8's are the most powerful of the low-priced three. And that extra power lets you handle the ruggedest hauling jobs with less engine strain. Less strain means less wear and, of course, fewer repairs. Exclusive Power-Dome design delivers premium performance on regular gas, too. "I save money both ways", says Jim Ryder. "But more important, I know that my customers will be thoroughly satisfied with any Dodge *Power Giant* they lease."

Why not do as Jim Ryder did . . . check into the facts with your Dodge dealer. You'll find a Dodge *Power Giant* will pay off for you, whatever your business.

DODGE

PowerGiants

Most Power of the Low-Priced 3



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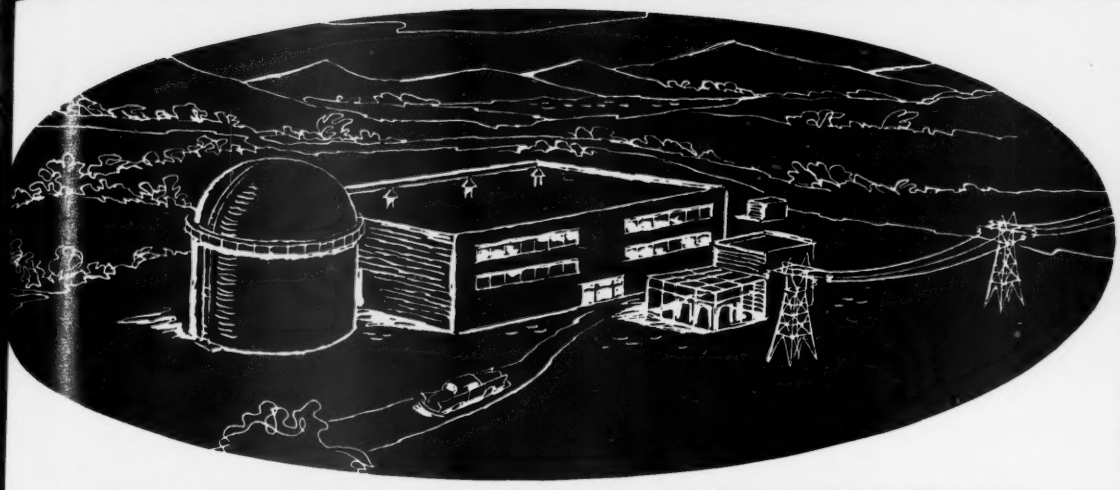

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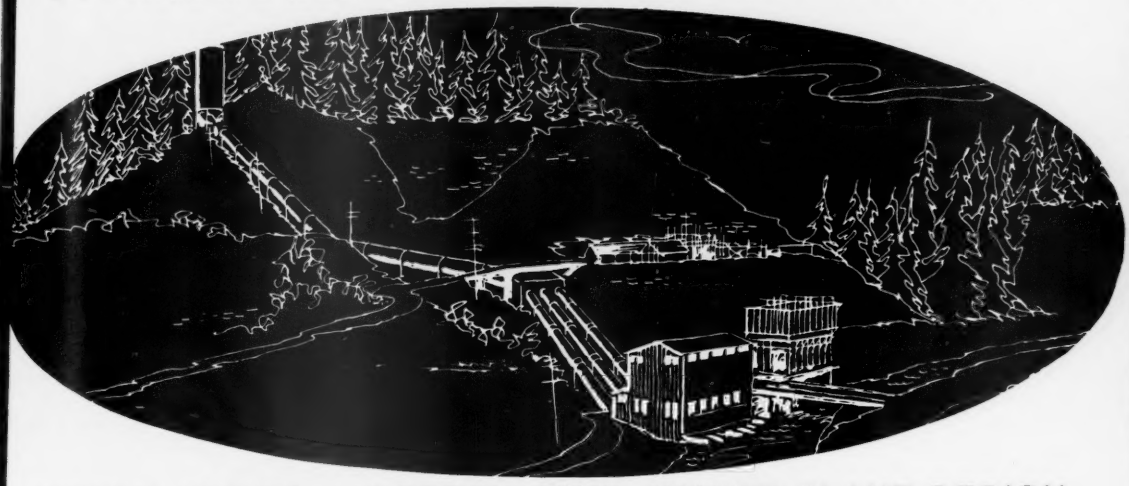

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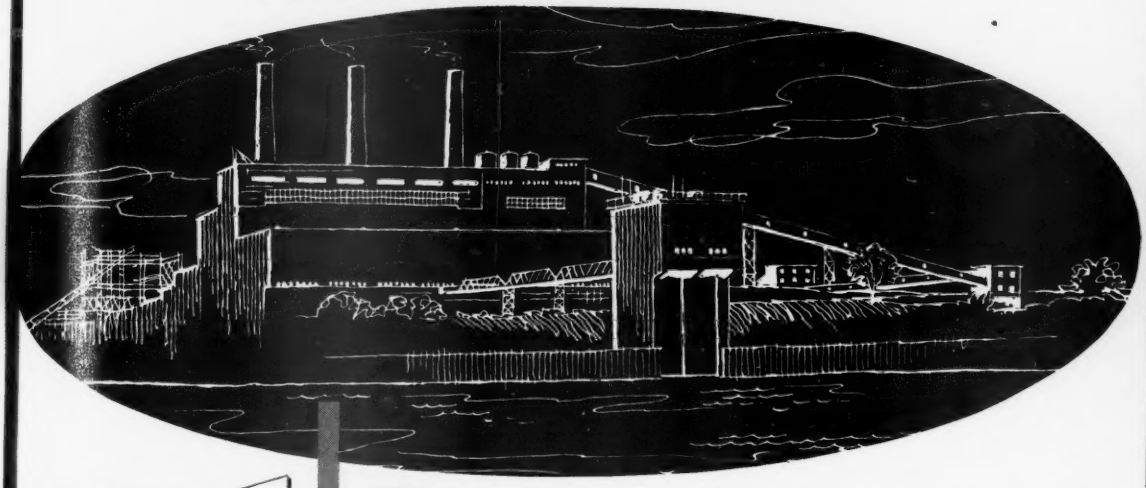

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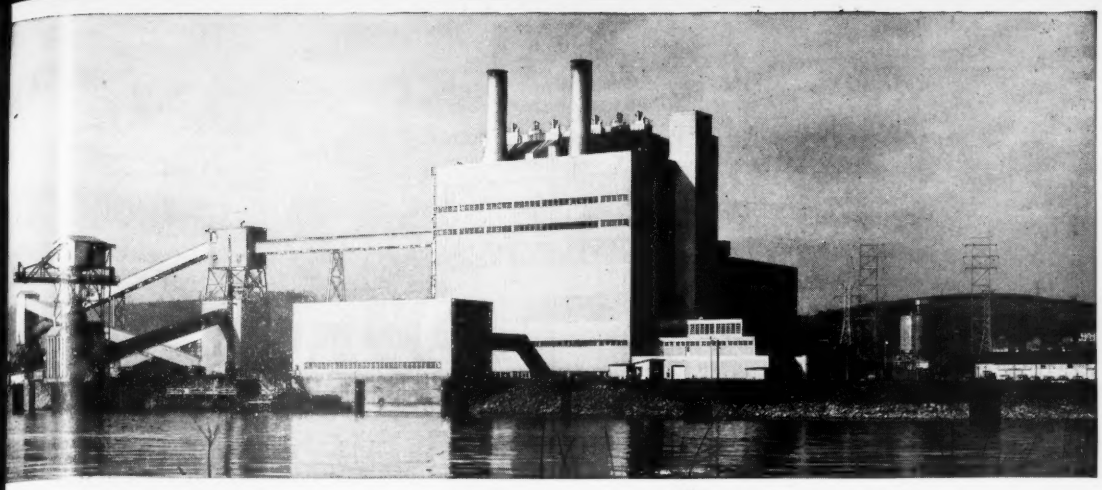
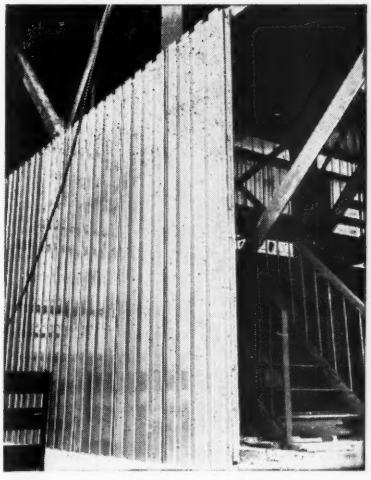


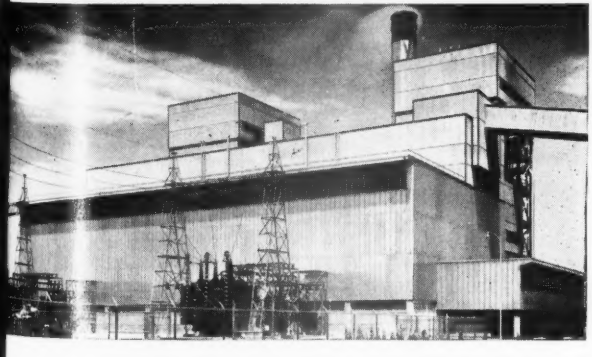
Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.

Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12″ masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.



Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.



More than 32,000 sq. ft. of Q-Panels were used to enclose the impressive Hawthorn Steam Electric Station (left) of the Kansas City, Missouri, Power and Light Company. Ebasco Services, Inc., designed and built the plant.

Robertson

Q-Panels

H. H. Robertson Company

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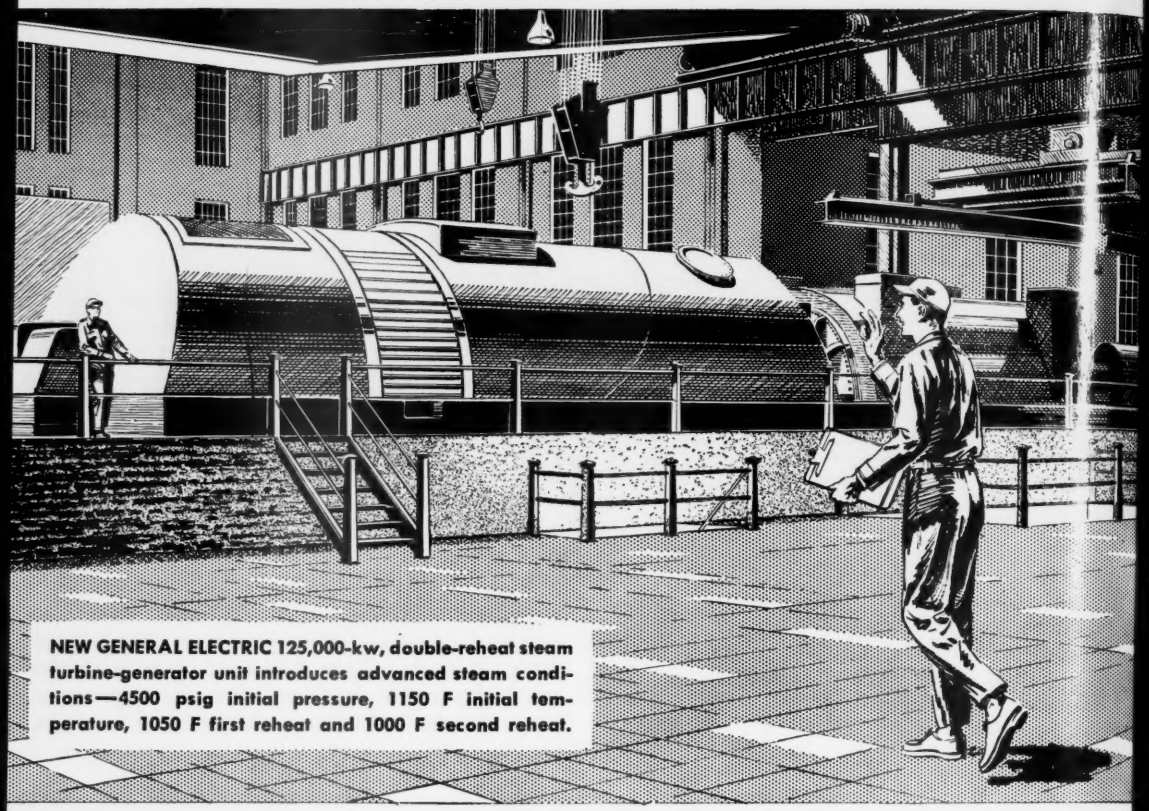

NEW GENERAL ELECTRIC 125,000-kw, double-reheat steam turbine-generator unit introduces advanced steam conditions—4500 psig initial pressure, 1150 F initial temperature, 1050 F first reheat and 1000 F second reheat.

New General Electric steam turbine at American Gas and Electric System's Philo Plant opens way to . . .

New Economies in Electric Power Generation

The new General Electric 125,000-kw, supercritical-pressure turbine marks a new milestone in the progress of steam turbine-generator technology. By taking advantage of the thermodynamic gains that can be realized with the use of these higher pressures and temperatures, steam stations will be able to extract still more power from every pound of fuel burned—thus helping to keep electricity today's greatest bargain.

In building this turbine for the Ohio Power Company's Philo Plant some new and forward-looking design concepts were introduced. Representing the first major step in increasing pressure since a maximum of 2300 psig was reached in the early 1940's, this turbine operates at the supercritical pressure of 4500 psig—almost double the highest pressure used for power generation in this country to date.

THE EXPERIENCE GAINED during the design and manufacture of this first supercritical-pressure steam turbine is already being applied to the construction of larger units for even more economical operation. Operation of this Philo unit will provide valuable experience in evaluating the economics of higher pressures and temperatures. For more information write for bulletin GER-1130, Large Steam Turbine-Generator Department, General Electric Company, Schenectady 5, New York. 354-59

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